This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.

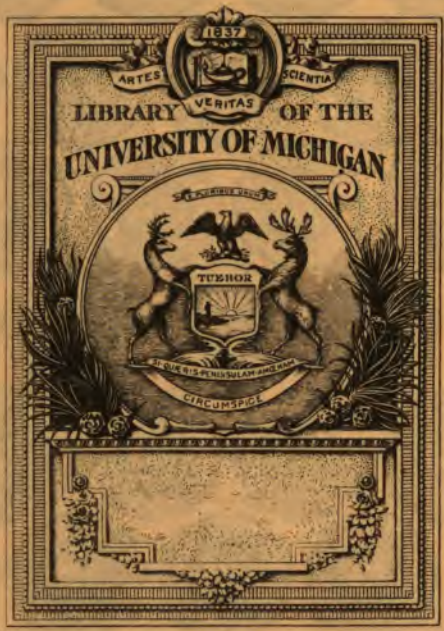
+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.

+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.

+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`


1837
ARTES
VERITAS
SCIENTIA
LIBRARY OF THE
UNIVERSITY OF MICHIGAN
TUEBOR
CIRCUMSPICE

ASTRON
OBS.
QE
395
.F69

METEORITES

PART I. PRICES OF INDIVIDUAL SPECIMENS

PART II. THE FOOTE COLLECTION—WITH SYNOPSIS OF THE ROSE-TSCHERMAK-BREŽINA CLASSIFICATION

THE COVER ILLUSTRATION IS A SERIES FROM THE STONE SHOWER NEAR HOLBROOK, NAVAJO COUNTY, ARIZONA, JULY 19th, 1912. PHOTOGRAPHED ON THE LOOSE SOIL. SEE PAGES 7 AND 40.

PUBLISHED NOVEMBER 15th, 1912

BY THE

FOOTE MINERAL COMPANY, Philadelphia

107 NORTH 19th STREET, PHILADELPHIA, PA., U. S. A.

ESTABLISHED 1876

CABLE ADDRESS: "FOOTE PHILADELPHIA"

PLATE I.

Kilbourn, Columbia Co., Wisconsin. x 1. Diameter.
Gray Chondrite. Fell June 16, 1911, striking
a Barn. Pages 11 and 35.

Astron. Observ.
2-18-28

©12-12-28 N.C.M.

PART I

Prices of Individual Specimens

INTRODUCTORY

We have in stock (November 15, 1912) all specimens listed.

If a specimen is ordered which has been sold, the nearest priced specimen on hand will be sent for inspection, at our risk and expense, and without obligation on the part of the recipient.

Other localities are reaching us constantly. Supplementary typewritten list will be sent on application.

Transportation Prepaid to any address in the world.

Approval System. Specimens are sent at our risk and expense to any public institution, without reference, but individuals unknown to us should send either references or cash in advance. Any or all specimens may be returned at our expense.

Exchangers are invited to send lists of their duplicates with weights and prices. Most falls, even though duplicating our stock, will be accepted in part payment for cataloged specimens. Casts and microscopic slides of meteorites, meteoritic minerals and terrestrial iron are also desired. See page 28 for other exchanges.

The "One Price" System prevails, our terms being the same to all.

A 10% Reduction is given on any consignment valued at $20.00 or more, when kept entire, but no discounts are given on any other condition. If any specimen is returned, the invoiced prices are net.

Rate of Exchange is accepted as —— $1.00 = 4/— = M. 4 = Fcs. 5, = L. 5.

Value Guarantee. Our prices average lower than those of other dealers. Any specimen valued at $5.00 or over may be returned within one year of purchase and the price paid will be refunded, thus insuring price stability.

Low Price of Controlled Falls. We call especial attention to the prices on falls originally owned entirely by us. They are lower than the figures asked by dealers or institutions for other

Hem.

falls of like groups and weights. Examples are: *Tombigbee River (Jachin), Sacramento Mts., Kingston, Amalia and Holbrook.*

The Gram Price of each locality (or fall) is given on page 62.

The Bailey Collection. A rare opportunity is here presented for collectors or institutions to secure certain falls which may never enter the market again, especially such as are now distributed and securely held by institutions. We refer to the numerous rarities of the historic collection formed by the late S. C. H. Bailey, of Oscawana, New York. During the last third of the 19th century it was one of the finest private collections of meteorites in the world.

Preparation, We use every precaution to avoid errors, affixing a neatly typewritten or printed label on the back of each specimen or its container. Glass-cover boxes, such as shown in plate III, are used as containers for all small specimens. The irons have all been repolished and etched recently, being treated with our improved process and new materials for insuring both chemical stability and a natural surface.

Reference to Original Description of each fall, appears in the Foote Collection Catalog, an index to which will be found on pages 62 and 63.

Dimensions given are only *average.* Weights are exact to within 1 gram on very common and 0.1 gram on other specimens.

An innovation in meteorite evaluation is here introduced. Apart from the accepted variation because of weight, the price per gram varies in slices of the same fall according to relative area, a thick piece being priced somewhat cheaper than a thin one of the same weight.

1 centimeter (cm.) = 0.3937 inch.

1 gram = 0.0353 ounce avoirdupois = 15.432 grains.

28.35 grams = 1 ounce avoirdupois.

453.6 grams = 1 pound avoirdupois.

Sawing and Polishing to Order. We are equipped with machinery for slicing and polishing both irons and stones. Etching and preservation of irons against rust are accomplished by improved methods and materials. Payment for work may be made in meteorites or cash at the rate of one dollar per hour.

Extra Copies of this Catalog sent on request, post paid.

I. Aerolites or Stones

A. Fall Recorded

Fell.	Name, Locality, Classification, Symbol, Average Dimensions, Description.	Grams.	Price. $
Feb. 16. 1883	**Alfianello,** Brescia, Italy.		
	Intermediate chondrite, Ci. Specimen 4.7 x 4 x 2.5 cm. Ash-gray, fine grained, easily visible metallic grains	132.	13.00
	ditto, piece 5 x 3.5 x 2 cm	118.	12.00
	ditto, fragment 3.5 x 2 x 0.5 cm	11.	1.25
	ditto, small fragments, lot	11.	1.00
July 10. 1899	**Allegan,** Allegan Co., Michigan.		
	Ornansite, Cco. Specimen 3.7 x 3 x 1.5 cm. Friable, few metallic grains. Chondrules readily separable	44.	8.00
May 26. 1893	**Beaver Creek,** West Kootenai District, British Columbia.		
	Spherical chondrite, crystalline, Cck. Specimen with crust 4 x 3.8 x 1.9 cm. Dark brownish gray, small glassy chondrules, fine metallic grains. Crust dull black. Bailey collection	74.	74.00
Aug. 14. 1846	**Cape Girardeau,** Cape Girardeau Co., Missouri.		
	Spherical chondrite, Cc. Specimen 1.8 x 1.5 x 1.5 cm. Brownish gray, small metallic grains. Thin black crust. Bailey collection.	6.7	13.40
May 14. 1874	**Castalia,** Nash Co., North Carolina.		
	Gray chondrite, breccia-like, Cgb. Slab 3 x 2 x 0.8 cm. Grayish black somewhat rusted, polished, with crust. Bailey collection	16.5	16.50
July 14. 1860	**Dhurmsala,** Punjaub, India.		
	Intermediate chondrite, Ci. Specimen 5 x 2.5 x 1 cm. Gray with large rusty grains, compact with bluish gray nodules. Bailey collection	40.	5.50
Mar. 19. 1884	**Djati Pengilon,** Ngawi, Java.		
	Crystalline chondrite, Ck. Specimen 2.7 x 1 x 0.5 cm. Gray piece with minute metallic grains	5.2	5.00
Nov. 16. 1492	**Ensisheim,** Upper Alsace, Germany.		
	Crystalline chondrite, breccia-like, Ckb. Specimen 2 x 1 x 0.8 cm. Dark gray, fine grained; black, smooth and shining in patches, polished. Bailey collection	2.2	2.20

PLATE II.

Reported Effect of the Kilbourn Aerolite on Flooring after penetrating the Roof of a Barn.

Fell.	Name, Locality, Classification, Symbol, Average Dimensions, Description.	Grams.	Price. $
June 25. 1890	**Farmington,** Farmington Township, Washington Co., Kansas. Black chondrite, veined, Csa. Specimen 2.1 x 2.1 x 0.7 cm. Polished, grayish black with white radiated chondrules, large metallic grains. Thin crust	13.	1.00
May 2. 1890	**Forest,** Winnebago Co., Iowa. Spherical chondrite, breccia-like, Ccb. Complete individual 4.5 x 3.4 x 2 cm. Completely incrusted, showing primary and secondary brownish black crust, well pitted. Bailey collection	75.	7.50
July 19. 1912	**Holbrook,** Navajo Co., Arizona. Spherulitic chondrite, Crystalline, Cck. (Merrill.) Light gray with round and polyhedral chondrules, some of darker gray. A few break free from matrix. Many large and small metallic grains. *No individuals of less than* 10 *grams nor more than* 100 *grams are sold except in series of* 500 *grams or more.* The following lots resemble the one shown on outside cover of catalog. Each series contains from 10 to 20 of the larger specimens to illustrate the following characteristics: (a) Radial flow on front, thicker overflow fringing back crust. (b) Pit formed by burning out of pyrrhotite nodule, leaving slaggy remnant in bottom. (c) Genesis of fusion; primary and secondary crust with tertiary crust commenced as a smoky alteration. (d) Crackled surface with exudation of molysite. (e) Soil line showing depth of partial burial. (f) Polished half of individual showing chondritic structure and disseminated nickel-iron. Several kilos of the loose soil in which the stones were found will be furnished with each series, if requested. It is useful in demonstrating the shallow burial and comparatively low velocity immediately preceding the impact. Series I and II clearly show in the same individual, a confirmatory soil line between the radiately marked front and the fringing overflow on back. Because of the low price and great scientific as well as popu-		

lar interest, three-quarters of the Holbrook fall was permanently distributed as soon as offered in October. Those desiring series should order immediately. The small stones vary from about 0.4 cm. to 2 cm. length. All of the individuals are complete except the one showing pyrrhotite nodules in each lot. A thin section for the microscope accompanies each series. Extra sections, $1.50. See plate III.

Series I.	1 large individual, 18 x 8 x 6 cm.	2270 grams	
	35 individuals of 10 to 1274 grams each, the largest measuring 11 x 8 x 6 cm. ...	5350 "	
	800 small individuals of 0.1 to 9 grams each	1642 "	
	Total, 836 specimens..	9262.	555.00
Series II.	1 large individual, 10 x 10 x 8 cm.	1862 grams	
	30 individuals of 10 to 943 grams each, the largest measuring 10 x 7 x 5 cm.	4120 "	
	610 small individuals of 0.1 to 9 grams each	1310 "	
	Total, 641 specimens..	7292.	440.00
Series III.	1 large individual, 16 x 9 x 6 cm.	1814 grams	
	28 individuals of 10 to 750 grams each, the largest measuring 11 x 10 x 2.5 cm..	3236 "	
	500 small individuals of 0.1 to 9 grams each.	1335 "	
	Total, 529 specimens..	6385.	380.00
Series IV.	1 large individual, 9 x 7 x 6 cm.	822 grams	
	26 individuals of 10 to 670 grams each, the largest measuring 9 x 7 x 5 cm.	2382 "	
	350 small individuals of 0.1 to 9 grams each	710 "	
	Total, 377 specimens..	3914.	235.00
Series V.	1 large individual, 9 x 7 x 5 cm..	648 grams	
	21 individuals of 10 to 475 grams each, the largest measuring 7 x 6 x 4 cm.	1898 "	
	225 small individuals of 0.1 to 9 grams each.	426 "	
	Total, 247 specimens..	2972.	200.00
Series VI.	1 large individual, 10 x 5 x 5 cm.	608 grams	
	18 individuals of 10 to 367 grams each, the largest measuring 7.5 x 6 x 3 cm.	1400 "	
	220 small individuals of 0.1 to 9 grams each,	500 "	
	Total, 239 specimens..	2508.	170.00
Series VII.	1 large individual, 9 x 6.5 x 4 cm.	522 grams	
	18 individuals of 10 to 210 grams each, the largest measuring 5 x 5 x 3.5 cm.	1292 "	

Fig. 1. Holbrook, Navajo Co., Arizona. Fell July 19, 1912. Spherical Chondrite, Crystalline. Soil Line indicates oblique Angle of Flight. x 1. Diameter. This Specimen is contained in Series I. See Pages 7 and 40.

Fig. 2. Glass-cover Box used for Mounting Small Specimens.

HOLBROOK
Navajo Co., Arizona
Sph. Cho., Crys. Cck.
Fell July 19, 1912
FOOTE, PHILAD'A

AHUMADA
Chihuahua, Mexico
Pallasite. Rokicky
Group, Pr. F'nd 1909
FOOTE, PHILAD'A

KINGSTON
SierraCo., New Mex.
Med. Octahed., Om.
Found 1891
FOOTE, PHILAD'A

Samples of Labels.

PLATE III.

190 small individuals of 0.1 to 9 grams each.	280	"	
Total, 209	specimens..2094.		145.00
Series VIII. 1 large individual, 8 x 7 x 4 cm. ..	455	grams	
18 individuals of 11 to 230 grams each, the largest measuring 8 x 3 x 3 cm.	1010	"	
75 small individuals of 0.1 to 9 grams each.	150	"	
This is the particular series used for the cover illustration.			
Total, 94	specimens..1615.		115.00
Series IX. 1 large individual, 4.5 x 4 x 4 cm.	182	grams	
19 individuals of 10 to 120 grams each, the largest measuring 5 x 3.5 x 3 cm.	887	"	
105 small individuals of 0.1 to 9 grams each.	158	"	
Total, 125	specimens..1227.		85.00
Series X. 1 large individual, 5 x 4 x 3 cm...	170	grams	
13 individuals of 10 to 116 grams each, the largest measuring 4 x 3 x 3 cm.	490	"	
64 small individuals of 0.1 to 9 grams each.	58	"	
Total, 78	specimens.. 718.		50.00
Series XI. 1 large individual, 6 x 4 x 3 cm...	132	grams	
10 individuals of 10 to 116 grams each, the largest measuring 4.5 x 4 x 3 cm.	314	"	
50 small individuals of 0.1 to 9 grams each.	58	"	
Total, 57	specimens.. 504.		35.00

Holbrook.

The following are complete individuals. In ordering, mention whether a completely incrusted stone is desired or one showing the genesis of fusion. The other features illustrated in the preceding series are absent in the following. They are priced higher per gram because sold singly:

With one side polished, the same price per gram is charged, plus $0.25 per specimen.

90 grams, $8.00; 80 grams, $7.00; 67 grams, $6.00; 53 grams, $5.00; 42 grams, $4.00; 32 grams, $3.00; 25 grams, $2.50; 20 grams, $2.00; 18 grams, $1.75; 15 grams, $1.50; 13 grams, $1.25; 10 grams, $1.00.

Fell.	Name, Locality, Classification, Symbol, Average Dimensions, Description.	Grams.	Price. $
Feb. 12. 1875	**Homestead,** Iowa Co., Iowa. Gray chondrite, breccia-like, Cgb. Polished end-piece 5.4 x 3.8 x 1 cm. Gray, numerous large metallic grains. Half incrusted, crust thin, with broad pits. Bailey collection	64.	6.50
	ditto, polished end-piece 3.5 x 2.9 x 1.3 cm.	40.	4.00
	ditto, polished piece 3.4 x 1.6 x 1.4 cm. Small crust	30.	2.50
Dec. 1. 1889	**Jelica,** District of Cacak, Jelica Mountains, Servia. Amphoterite, Am. Fragment 2.4 x 1.7 x 0.9 cm. Light gray, few large metallic grains, friable, bluish gray nodules. 1/3 incrusted. Bailey collection	6.	9.00
June 30. 1903	**Kermichel,** Morbihan, France. Crystalline chondrite, Ck. Polished slab 4 x 1.7 x 1.4 cm. Brownish, small metallic grains thickly disseminated. Reddish crust.	33.	50.00
	ditto, polished piece 2 x 1.4 x 0.7 cm.	7.9	14.00
	ditto, fragments	1.1	2.00
June 16. 1911	**Kilbourn,** Columbia Co., Wisconsin. Gray chondrite, veined, Cga. Polished slice, 2/3 complete section, 6.8 x 3.4 x 0.8 cm. Gray; large, rusted brownish, thickly disseminated metallic grains. Broadly pitted dull crust. See plate I	53.	225.00
	ditto, polished slice, 1/3 section, 4 x 2.6 x 0.8 cm.	27.	120.00
June 9. 1866	**Knyahinya,** near Nagy-Berezna, Hungary. Gray chondrite, Cg. Piece 3.3 x 2.9 x 1.9 cm. Brownish gray, few metallic grains. Small pitted crust	57.	5.50
Apr. 26. 1803	**L'Aigle,** Dep. Orne, Normandie, France. Intermediate chondrite, breccia-like, Cib. Roughly broken, complete section, 4.5 x 2.3 x 2.2 cm. Brownish, compact, porphyry-like, fine metallic grains. Covered with brownish-black thin crust. Bailey collection	82.	15.00
	ditto, end-piece 3.3 x 2. x 2 cm., ¾ incrusted	39.	7.00
Dec. 22. 1863	**Manbhoom,** Bengal, India. Amphoterite, Am. 2 x 1.3 x 0.9 cm. Light gray, coarsely crystalline, gray bronzite with olivine. Small crust. Bailey collection	4.3	13.00
	ditto, piece 1.3 x 1 x 0.5 cm. Small crust	2.	6.00
	ditto, small fragments	0.7	2.00

Fell.	Name, Locality, Classification, Symbol, Average Dimensions, Description.	Grams.	Price. $
Feb. 25. 1847	**Marion,** Linn Co., Iowa. White chondrite, veined, Cwa. Polished piece 5 x 2.8 x 1.2 cm. Light gray with numerous rusty spots, large metallic grains and crust. Bailey collection	45.	18.00
	ditto, piece 1.7 x 1.5 x 0.6. Small crust	5.	2.00
June 9. 1889	**Mighei,** Gov. Kherson, Russia. Carbonaceous chondrite, K. Piece 2.5 x 2 x 1.2 cm. Black, very friable, bituminous odor, earthy graphitic, chondrules of lighter color distributed through the mass. Small scoriaceous crust	6.5	8.00
	ditto, small fragments	0.7	1.00
Apr. 10. 1890	**Misshof,** Kurland, Russia. Spherulitic chondrite, Cc. Piece 1.6 x 1.3 x 0.9 cm. Light gray chondrules with many rusty spots and large metallic grains	6.2	4.00
Feb. 3. 1882	**Mocs,** Transylvania, Austria-Hungary. White chondrite veined, Cwa. Half of a complete individual 5 x 4 x 2.4 cm. Light gray, rusty spots, metallic grains, ¾ incrusted. Bailey collection	145.	13.00
July 1. 1879	**Nagaya,** Entre Rios, Argentina. Carbonaceous chondrite, K. Piece 1.7 x 1.1 x 1 cm. Black with few gray chondrules disseminated, earthy graphitic, one surface scoriaceous, bituminous odor. Bailey collection	3.3	6.60
July 11. 1868	**Ornans,** Doubs, France. Ornansite, Cco. Piece 1.4 x 1.2 x 1.2 cm. Bluish-gray, fine chondrules. Bailey collection	4.8	19.20
June 18. 1881	**Pacula,** Jacala, Hidalgo, Mexico. White chondrite, breccia-like, Cwb. Piece 3 x 1.2 x 0.6 cm. Light gray, one surface black, smooth and shining, rusty spots, veined, minute metallic grains. Thin small shining crust. Bailey collection	5.9	18.00
Jan. 30. 1868	**Pultusk,** Poland, Russia. Gray chondrite, breccia-like, Cgb. Polished slice 6 x 4 x 0.6 cm. Gray, with numerous large and rusty metallic grains. Crust. Bailey collection	49.	3.00
	ditto, polished slice 6.2 x 2.6 x 0.5 cm.	30.	1.80
	ditto, polished slice 3.5 x 1.8 x 1 cm.	21.	1.25

Fell.	Name, Locality, Classification, Symbol, Average Dimensions, Description.	Grams.	Price. $
Nov. 15. 1898	**Saline,** Saline Township, Sheridan Co., Kansas. Spherical chondrite, crystalline, Cck. Polished slice 4.3 x 3 x 1.2 cm. Dark brownish, compact, abundant metallic grains. With crust	38.	8.00
	ditto, polished piece 4.7 x 1.6 x 1.1 cm. Small crust	29.	6.00
	ditto, polished piece 2.2 x 2 x 1 cm.	15.	3.50
	ditto, polished piece 1.9 x 1.8 x 1.1 cm. With crust	10.	2.25
	ditto, polished piece 1.5 x 1 x 0.8 cm. ¼ incrusted	3.5	1.00
Aug. 13. 1904	**Shelburne,** Ontario, Canada. Gray chondrite, Cg. Piece 3.5 x 2.7 x 1.5 cm. Light gray, spotted rusty brown, numerous metallic grains, 1/3 incrusted.	51.	12.50
	ditto, piece 4.5 x 2.5 x 2.5 cm.	62.	15.00
	ditto, polished piece 2.9 x 2.6 x 1.5 cm. 1/3 incrusted	26.	8.00
	ditto, piece 2.5 x 2.4 x 1.7 cm. Small crust.	26.	7.00
	ditto, piece 3.8 x 3.1 x 0.7 cm.	23.	6.00
	ditto, polished piece 2.9 x 2.3 x 1.3 cm.	21.	5.00
	ditto, fragments	16.	3.50
	ditto, piece 1.7 x 1.7 x 1 cm.	10.	2.50
Aug. 30. 1877	**Tabory,** Gov. Perm, East Russia. Spherulitic chondrite, breccia-like, Ccb. Piece 2.6 x 2.3 x 1.5 cm. Gray, with metallic grains. Bailey collection	25.	5.00
Dec. 7. 1863	**Tourinnes-la-Grosse,** Belgium. White chondrite, Cw. Fragment 1.2 x 0.8 x 0.5 cm. Light gray, minute metallic grains. Bailey collection	1.4	1.25

B. Fall Not Recorded

Found.	Name, Locality, Classification, Symbol, Average Dimensions, Description.	Grams.	Price. $
1892	**Long Island,** Phillips Co., Kansas. Intermediate chondrite, veined, Cia. Mass 7.2 x 4.7 x 3.5 cm. Compact, fine grained structure, dark greenish, rusted reddish brown, one slickensided surface, 1/3 covered with pitted brown crust. Bailey collection	123.	10.00
1870	**MacKinney,** Collin Co., Texas. Black chondrite, Cs. Polished slice 5 x 4.7 x 1.5 cm. Dull black, with large metallic		

Found.	Name, Locality, Classification, Symbol, Average Dimensions, Description.	Grams.	Price. $
	grains, compact, reddish brown crust 1 mm. thick. Bailey collection	113.	9.00
	ditto, polished piece 5 x 3.7 x 2.6 cm. 1/3 incrusted	110.	9.00
	ditto, polished slice 5 x 4 x 0.9 cm. With crust.	60.	5.00
	ditto, polished slice 5 x 4 x 0.6 cm. With crust.	54.	4.50
	ditto, polished slice 4 x 2.7 x 0.3 cm.	17.	1.75

II. Siderolites or Stony Irons

C. Fall Recorded

(Only four are known)

Fell.	Name, Locality, Classification, Symbol, Average Dimensions, Description.	Grams.	Price. $
May 10.	**Estherville,** Emmet Co., Iowa.		
1879	Mesosiderite, M. Polished slice 7 x 5 x 1 cm. Nickel-iron appears in large nodules. Greenish black ground-mass	50.	6.50
	ditto, polished slice of uniform thickness 3.5 x 3 x 0.8 cm.	37.	5.00
	ditto, polished slice of uniform thickness 3 x 2.3 x 0.8 cm.	26.	3.50
	ditto, polished slice of uniform thickness 3 x 2 x 0.8 cm.	19.	2.50
	ditto, polished end-piece 3.5 x 2 x 1 cm.	22.	2.75

D. Fall Not Recorded

Found.	Name, Locality, Classification, Symbol, Average Dimensions, Description.	Grams.	Price. $
1881	**Admire,** Lyons Co., Kansas.		
	Pallasite-Rokicky group. Pr. Piece 5.0 x 5 x 4 cm. Showing nickel-iron and olivine grains of 1 cm. more or less, mostly oxidized	363.	25.00
	ditto, piece much oxidized 4 x 4 x 3.5 cm.	181.	18.00
	ditto, piece 3.5 x 3 x 3 cm. 1/3 oxidized	117.	11.00
	ditto, piece 4 x 3 x 2.5 cm. Corner oxidized	80.	8.00
	ditto, piece 3.5 x 3 x 1.3 cm. End oxidized	52.	5.00
	ditto, fragments partly oxidized	31.	3.00
	ditto, piece 2.7 x 2.5 x 2 cm. ½ oxidized	24.	2.50
1909	**Ahumada,** Chihuahua, Mexico.		
	Rokicky Pallasite, Pr. Polished end-piece 12 x 5 x 2 cm. Well defined 6-8 sided crystals of greenish black to yellowish olivine mostly 1-2 cm. diameter, strikingly contrasted in a coarsely crystallized iron, as shown in plate IV	340.	75.00

PLATE IV.

Ahumada, Chihuahua, Mexico. Found 1909. Pallasite, Rokicky Group. x 1. Diameter. Specimen in Foote Collection. See Pages 14 and 44.

Found.	Name, Locality, Classification, Symbol, Average Dimensions, Description.	Grams.	Price. $
	ditto, polished slice of uniform thickness 6.3 x 3.7 x 1 cm.	108.5	28.00
	ditto, polished slice of uniform thickness 3 x 3 x 1 cm.	41.	12.00
	ditto, fragments nickel-iron, spongiform	15.	4.00
	ditto, polished slice of uniform thickness 2 x 2 x 0.8 cm.	12.5	3.75
	ditto, piece 2.3 x 1.5 x 0.8 cm.	7.5	2.25
1887	**Crab Orchard**, Cumberland Co., Tennessee. Grahamite, Mg. Polished slice, 6 x 2 x 0.7 cm. Stone and iron equally divided	34.5	3.75
1749	**Medwedewa**, Jeniseisk, Siberia. Pallasite-Krasnojarsk group, Pk. Spongiform fragment 2 x 1 x 1 cm.	8.7	2.00
1887	**Morristown**, Hamblen Co., Tennessee. Grahamite, Mg. Piece 2 x 1.7 x 1 cm. Stone and metal about equal in quantity	10.5	2.00
	ditto, fragments	12.5	2.50
1861	**Vaca Muerta**, Sierra de Chaco, Chile. Grahamite, Mg. Polished piece 3 x 2.5 x 0.4 cm. Structure varying from fine granular to coarse granular, metal slightly predominating	12.	3.00

III. Siderites or Irons

E. Fall Recorded

(Only nine are known)

Fell.	Name, Locality, Classification, Symbol, Average Dimensions, Description.	Grams.	Price. $
Aug. 1. 1835	**Charlotte**, Dickson Co., Tennessee. Fine octahedrite, Of. Polished slice 3 x 2 x 0.4 cm. Typical figures. Bailey collection	20.	70.00
Nov. 27. 1885	**Mazapil**, Zacatecas, Mexico. (Fell during the Leonid shower of meteors.) Medium octahedrite, Om. Polished slice 3.5 x 2.2 x 0.3 cm. Distinct figures. Bailey collection	19.	110.00

F. Fall Not Recorded

Found.	Name, Locality, Classification, Symbol, Average Dimensions, Description.	Grams.	Price. $
1910	**Amalia** Farm, near Gibeon, German S. W. Africa. (Amalia is probably identical with Mukerop, the average trade price of which is three-fold our price for Amalia.)		

Found.	Name, Locality, Classification, Symbol, Average Dimensions, Description.	Grams.	Price. $
	Finest octahedrite, Off. Complete section of uniform thickness, etched, 25 x 17 x 0.7 cm. Well defined straight figures, which on three ends curve in a strongly marked flow structure. A large troilite nodule lies in a fusion-line of apparent joining or faulting, the crystallization showing in different angles on either side. Numerous smaller nodules and rods of troilite.....	2610.	135.00
	ditto, complete section 24 x 14 x 0.6 cm. Striking outline, due to spur having flow structure. Piece nearly identical with plate VI.	1718.	95.00
	ditto, ½ section 14 x 9.5 x 0.8 cm.....	915.	24.00
	Following have neither fusion nor flow structure:		
	ditto, ¾ section 19 x 16 x 0.8 cm. Numerous small troilite nodules and rods.....	1622.	45.00
	ditto, polished slice of uniform thickness 10 x 6.5 x 0.7 cm.	407.	12.50
	ditto, polished slice of uniform thickness 9 x 5 x 0.3 cm.	147.	6.00
	ditto, polished slice 5.3 x 3.2 x 1.4 cm.....	224.	6.00
	ditto, polished piece 6.5 x 2.5 x 1.5 cm.....	93.	3.50
	ditto, polished slice 5.5 x 3.2 x 0.3 cm.....	45.	2.50
	ditto, polished slice 7 x 2 x 0.7 cm.....	65.	2.50
1898	**Arispe**, Sonora, Mexico.		
	Broadest octahedrite, Ogg. Polished, wedge-shaped slice 5.8 x 4.2 x 0.4 cm. Coarse distinct figures	57.	5.75
	ditto, polished, wedge-shaped slice 3 x 4 x 0.4 cm.	32.	3.25
	ditto, polished slice 3.2 x 2 x 0.4 cm.....	18.	1.80
	ditto, polished slice 3.1 x 2.1 x 0.2 cm.....	12.	1.25
1888	**Bella Roca**, Sierra de San Francisco, Durango, Mexico.		
	Fine octahedrite, Of. Half of complete section, polished, uniform thickness 7.5 x 5.8 x 0.6 cm. Perfect figures, troilite rods, schreibersite	190.	37.00
	ditto, section 6.8 x 5.7 x 0.6 cm.....	182.	34.00
1784	**Bendego**, Bahia, Brazil.		
	Broad octahedrite, Og. Etched section of uniform thickness 4.6 x 3 x 0.5 cm. Coarsely crystalline structure with imperfect figures. Bailey collection	50.	6.50

Found.	Name, Locality, Classification, Symbol, Average Dimensions, Description.	Grams.	Price. $
1890	**Bridgewater,** Burke Co., North Carolina. Fine octahedrite, Of. Etched slice 4.8 x 2.3 x 0.4 cm. Well marked figures. Bailey collection	33.	39.50
1783	**Campo del Cielo,** Gran Chaco, Argentina. Ataxite, Siratic group, Ds. Polished slice 2.5 x 0.9 x 0.2 cm. Poor in nickel. Bailey collection	4.	1.75
1891	**Cañon Diablo,** Coconino Co., Arizona. Broad octahedrite, Og. Complete individual 4.5 x 3 x 1.3 cm. Oxidized crust with broad shallow pits	84.	3.00
	ditto, half of end-piece 4.5 x 3 x 1.5 cm. Very coarse figures, flakes of schreibersite	100.	3.50
1793	**Cape of Good Hope,** South Africa. Ataxite, Cape group, Dc. Polished slice 5 x 2.8 x 0.4 cm. Dull mass with very fine network of indistinct lines. Bailey collection	40.8	17.00
1887	**Carlton,** Hamilton Co., Texas. Finest octahedrite, Off. Polished slice of uniform thickness 2 x 1.5 x 0.5 cm. Distinct figures, troilite	12.	1.25
1840	**Carthage,** Smith Co., Tennessee. Medium octahedrite, Om. Polished piece 2.5 x 2 x 0.4 cm. Distinct figures	12.9	3.25
1867	**Casas Grandes,** Chihuahua, Mexico. Prehistoric. Medium octahedrite, Om. Polished slice 6.3 x 3 x 6 cm. Typical figures, little taenite	94.	12.00
1877	**Casey County,** Kentucky. Broad octahedrite, Og. Polished slice of uniform thickness 3 x 1.5 x 0.2 cm. Coarse figures	3.8	5.30
	ditto, slice 1 x 0.6 x 0.2 cm	1.3	1.50
1860	**Cleveland,** Bradley Co., Tennessee. Medium octahedrite, Om. Polished slice of uniform thickness, distinct figures. Bailey collection	31.7	10.00
1873	**Coahuila,** Mexico. Normal hexahedrite, H. Couch Iron. Polished slice of uniform thickness 6.5 x 5.8 x 0.2 cm. Numerous fine Neumann lines, troilite nodules. Bailey collection	65.	9.00
	ditto, Butcher Iron, polished slice 5 x 3.2 x 0.3 cm. Bailey collection	37.	3.00

Found.	Name, Locality, Classification, Symbol, Average Dimensions, Description.	Grams.	Price. $
1860	**Coopertown,** Robertson Co., Tennessee. Medium octahedrite, Om. Polished slice of uniform thickness 2.2 x 2.2 x 0.3 cm. Figures with lamellæ 2 mm. thick (making this specimen a broad octahedrite). Bailey collection	13.4	13.40
1837	**Cosby's Creek,** Cocke Co., Tennessee. Coarse octahedrite, Og. Polished piece 4.5 x 3.5 x 1 cm. Structure very indistinct, troilite; oxidized exterior showing octahedral cleavage well. Bailey collection...	77.	7.75
1881	**Costilla Peak,** Taos Co., New Mexico. Medium octahedrite, Om. Polished slice of uniform thickness 3 x 2.6 x 0.3 cm. Typical figures, troilite	21.5	4.00
1877	**Dalton,** Whitfield Co., Georgia. Medium octahedrite, Om. Polished slice of uniform thickness 3.4 x 3 x 0.3 cm. Well-marked figures, schreibersite. Bailey collection	27.	8.75
	ditto, polished slice 1.7 x 0.8 x 0.3 cm.	3.2	1.00
1846	**Deep Springs,** Deep Springs Farm, Rockingham Co., North Carolina. Ataxite, Babbs Mill group, Db. Polished half section of uniform thickness 4.5 x 4 x 0.7 cm. Shows no figures, few troilite inclusions. Bailey collection	119.5	36.00
1780	**Descubridora,** San Luis Potosi, Mexico. Medium octahedrite, Om. Polished slice of uniform thickness 4 x 1.2 x 0.4 cm. Figures in long bands cross each other at nearly right angles. Bailey collection	17.	1.75
1891	**Forsyth County,** Georgia. Ataxite, Nedagolla group, Dn. Polished slice 6.5 x 2 x 0.2 cm. Shows no figures. Bailey collection	17.2	3.75
1890	**Franceville,** El Paso Co., Colorado. Medium octahedrite, Om. Polished slice of uniform thickness 2.5 x 1.7 x 0.3 cm. With fragment, well marked figures	15.	1.50
1884	**Glorieta Mountain,** Santa Fe Co., New Mexico. Medium octahedrite, Om. Polished slice of uniform thickness 4.2 x 3 x 0.3 cm. Beautiful figures, both broad and fine, troilite, on one side curved lamellæ. Bailey collection.	30.4	3.75

Found.	Name, Locality, Classification, Symbol, Average Dimensions, Description.	Grams.	Price. $
1883	**Grand Rapids,** Kent Co., Michigan. Fine octahedrite, Of. Polished piece 3 x 1.8 x 0.7 cm. Striking figures, oxidized exterior. Bailey collection	26.7	4.00
1882	**Hex River,** Cape Colony, South Africa. Normal hexahedrite, H. Polished slice of uniform thickness 3.7 x 3.2 x 0.5 cm. Very fine Neumann lines faintly discernible, parallel system of troilite plates. Bailey collection	49.4	25.00
1898	**Iredell,** Bosque Co., Texas. Normal hexahedrite, H. Fragment, oxidized exterior	4.5	6.75
	ditto, fragments	3.4	5.00
1885	**Jamestown,** Stutsman Co., North Dakota. Fine octahedrite, Of. Half of a complete section of uniform thickness 4.5 x 2 x 0.5 cm. Figures rather dimly outlined, troilites. Bailey collection	27.2	22.00
1887	**Kendall County,** Texas. Brecciated hexahedrite, Hb. Polished slice of uniform thickness 6 x 2.5 x 0.5 cm. Coarsely granular structure with schiller-like luster. Bailey collection	52.	15.00
	ditto, polished slice 3 x 1.8 x 0.4 cm. Bailey collection	13.	3.75
1889	**Kenton County,** Kentucky. Medium octahedrite, Om. Polished slice of uniform thickness 9 x 4.5 x 0.3 cm. Figures, troilites, octahedral cleavage very distinct on one edge. Bailey collection	98.	6.00
1891	**Kingston,** Sierra Co., New Mexico. Medium octahedrite, Om. Complete section of uniform thickness, polished, 16 x 8 x 1 cm. Brilliant figures, somewhat granulated at one end. Troilite nodules. See plate VII.	743.	250.00
	The following show no granulation:		
	ditto, complete section 12 x 7 x 0.5 cm.	330.	120.00
	ditto, half of a complete section, octahedral cleavage on edge 11 x 5 x 0.5 cm	210.	70.00
	ditto, polished slice 5.5 x 5 x 0.5 cm	110.	40.00
1828	**La Caille,** Var, France. Medium octahedrite, Om. Polished slice of uniform thickness 3 x 1.5 x 0.3 cm. Typical figures, tendency to separate along the cleavage planes. Bailey collection	11.2	9.00

Found.	Name, Locality, Classification, Symbol, Average Dimensions, Description.	Grams.	Price. $
1860	**La Grange,** Oldham Co., Kentucky. Fine octahedrite, Of. Polished slice of uniform thickness 2.5 x 2.5 x 0.3 cm. Distinct figures. Bailey collection	15.9	9.50
1814	**Lenarto,** Saros, Hungary. Medium octahedrite, Om. Polished slice of uniform thickness 3.2 x 1.4 x 0.4 cm. Distinct figures. Bailey collection	16.8	4.25
	ditto, polished 3.8 x 1.4 x 0.3 cm. Bailey collection	14.7	3.75
1882	**Linnville,** Burke Co., North Carolina. Ataxite, Babbs Mill group, Db. Polished end-piece 3 x 1.5 x 0.3 cm. Dull mass, showing no figures	15.2	90.00
	ditto, polished end-piece 1 x 1 x 0.2 cm.	1.2	8.50
1853	**Lion River,** Great Namaqualand, South Africa. (Probably the same as Mukerop.) Fine octahedrite, Of. polished, wedge-shaped slice 3.5 x 3.3 x 0.3 cm. Beautiful figures, plates narrow and very distinct. Bailey collection	20.9	8.00
1884	**Merceditas,** near Chanaral, Northern Chili. Medium octahedrite, Om. Polished slice of uniform thickness 4.3 x 2.4 x 0.3 cm. Beautiful figures, troilite. Bailey collection	27.3	7.00
1804	**Misteca,** Oaxaca, Mexico. Medium octahedrite, Om. Polished section of uniform thickness 4 x 2.5 x 0.5 cm. Figures distinct, showing much taenite. Bailey collection	42.	6.50
1897	**Mungindi,** Queensland, Australia. Finest octahedrite, Off. Polished slice of uniform thickness 4.8 x 2.3 x 0.3 cm. Figures sharply marked. Bailey collection	31.4	4.75
1856	**Nelson County,** Kentucky. Coarsest octahedrite, Ogg. Fragment 2.7 x 1.4 x 0.3 cm. Oxidized	7.	1.00
1895	**Nocoleche,** Wanaaring, New South Wales. Medium octahedrite, Om. Polished slice 3 x 1.8 x 0.5 cm. Interrupted figures, fine cracks in the structure lines, troilite. Bailey collection	21.9	11.00
1885	**Puquios,** Copiapo, Chili. Medium octahedrite, Om. Polished slice 6 x		

Found.	Name, Locality, Classification, Symbol, Average Dimensions, Description.	Grams.	Price. $
	3.3 x 0.5 cm. Distinct figures, troilite. Bailey collection	107.9	62.00
	ditto, polished slice of uniform thickness 4.7 x 3 x 0.5 cm. Much schreibersite	79.5	45.00
1895	**Reed City,** Osceola Co., Michigan. Coarse octahedrite, molten, Oge. Polished slice 8 x 5 x 0.5 cm. Coarse figures with slender and branching inclusions of schreibersite	215.	85.00
	ditto, polished slice 4 x 3 x 0.5 cm.	60.	25.00
1892	**Roebourne,** Queensland, Australia. Medium octahedrite, Om. Polished slice of uniform thickness 5.8 x 2 x 0.4 cm. Typical figures. Bailey collection	37.2	4.50
1844	**Ruff's Mountain,** Lexington Co., South Carolina. Medium octahedrite, Om. Polished, wedge-shaped slice 3.2 x 2 x 0.3 cm. Typical figures	14.4	3.10
1863	**Russell Gulch,** Gilpin Co., Colorado. Medium octahedrite, Om. Polished slice of uniform thickness 4.2 x 4 x 0.6 cm. Distinct figures, large troilite nodule	85.4	80.00
	ditto, polished slice of uniform thickness 4.6 x 3.4 x 0.6 cm.	73.4	70.00
	ditto, polished slice of uniform thickness 4.1 x 3.3 x 0.6 cm.	71.3	68.00
1896	**Sacramento Mountains,** Eddy Co., New Mexico. Medium octahedrite, Om. Complete polished section of uniform thickness 27 x 13.5 x 1.1 cm. Shows typical, beautifully outlined figures, one large troilite, several small ones. See plates VIII and IX	2854.	130.00
	ditto, complete section of uniform thickness 30 x 7 x 1 cm. Large, deep pit outlined	1684.	100.00
	ditto, complete section of uniform thickness 24.5 x 8.5 x 0.9 cm. With large perforation due to sectioning deep pit. Striking outline	1235.	80.00
	ditto, complete section 16.5 x 11 x 0.8 cm. With three large troilite nodules and outline of 6 cm. deep pit	992.	70.00
	ditto, slice of uniform thickness 13 x 8.5 x 0.5 cm. With striking outline due to sectioning of 6 cm. hemispherical pit	514.	40.00

Found.	Name, Locality, Classification, Symbol, Average Dimensions, Description.	Grams.	Price. $
	ditto, slice 11 x 8 x 0.3 cm. Same outline.....	351.	32.00
	ditto, slice 10 x 7 x 0.4 cm. Large troilite nodule (2 cm.).....	314.	25.00
	ditto, slice 10 x 6 x 0.4 cm.....	253.	17.00
	ditto, slice 6 x 5.7 x 0.6 cm.....	158.	12.00
	ditto, slice of uniform thickness 4 x 3 x 1 cm.	96.	7.00
	ditto, slice of uniform thickness 3.5 x 2.8 x 0.7 cm.	60.	5.00
	ditto, slice 4 x 2.5 x 0.4 cm.....	31.	3.00
1850	**Salt River,** Bullitt Co., Kentucky. Finest octahedrite, Off. Polished slice 2 x 1.3 x 0.6 cm. Figures irregular.....	13.5	27.00
1897	**San Angelo,** Tom Green Co., Texas. Medium octahedrite, Om. Polished slice of uniform thickness 6 x 2.8 x 0.3 cm. Typical figures	47.	4.75
1867	**Scottsville,** Allen Co., Kentucky. Normal hexahedrite, H. Polished slice of uniform thickness 3.1 x 1.3 x 0.5 cm. Network of delicate faint lines. Bailey collection..	16.1	8.00
1847	**Seeläsgen,** Brandenburg, Prussia. Coarsest octahedrite, Ogg. Polished slice 5.5 x 3.8 x 0.3 cm. Very irregular figures. Bailey collection	49.6	9.50
	ditto, polished slice 2 x 1.2 x 0.6 cm. Figures are well marked	12.	2.25
1716	**Senegal,** Upper Senegal River, West Africa. Ataxite, Siratic group, Ds. Polished section of uniform thickness 4.5 x 2.3 x 0.4 cm. Minute rhabdite prisms very numerous, poor in nickel. Bailey collection.....	29.7	60.00
1869	**Shingle Springs,** El Dorado Co., California. Ataxite, Shingle Springs group, Dsh. Polished slice of uniform thickness 2.1 x 1.3 x 0.5 cm. Very indistinct elongated blebs arranged in parallel rows. Bailey collection	12.3	10.00
1887	**Silver Crown,** Laramie Co., Wyoming. Coarse octahedrite, Og. Polished slice 4 x 2.1 x 0.5 cm. Irregular crystalline. Bailey collection	36.2	7.50
1840	**Smithville,** DeKalb Co., Tennessee. Coarse octahedrite, Og. Polished half section 10 x 8 x 0.8 cm. Beautiful figures, large		

Found.	Name, Locality, Classification, Symbol, Average Dimensions, Description.	Grams.	Price. $
	troilite nodule inclosed by graphite and schreibersite	511.	45.00
	ditto, half section 10 x 8.2 x 0.8 cm.	522.	45.00
	ditto, section 9.5 x 7.2 x 0.5 cm. Large troilite.	288.	28.00
1858	**Staunton,** Augusta Co., Virginia. Medium octahedrite, Om. Polished slice of uniform thickness 5 x 4.8 x 0.3 cm. Well defined figures. Bailey collection	58.	7.00
1784	**Toluca,** State of Mexico, Mexico. Medium octahedrite, Om. Polished end-piece 9 x 3.5 x 1.2 cm. Typical, coarse figures	377.	8.00
1878	**Tombigbee River (Jachin),** Choctaw Co., Alabama. Granular hexahedrite, Ha. Polished slice of uniform thickness 12 x 4.5 x 0.4 cm. Neumann lines intersecting at right angles, very beautiful large schreibersite figures of graphic form. See plate XI	205.2	60.00
	ditto, polished slice of uniform thickness 6.4 x 5 x 0.4 cm.	92.7	30.00
	ditto, polished slice of uniform thickness 3 x 3 x 0.3 cm.	26.3	8.00
	ditto, polished slice 4.6 x 2 x 0.3 cm.	25.8	6.00
	The following show few schreibersite figures:		
	ditto, polished end-piece 8 x 4.5 x 1.5 cm.	322.	30.00
	ditto, polished slice of uniform thickness 7 x 4 x 0.3 cm.	82.1	15.00
	ditto, polished slice 2.5 x 1.5 x 0.3 cm.	15.3	2.50
1888	**Welland,** Ontario, Canada. Medium octahedrite, Om. Polished slice of uniform thickness 2 x 2 x 0.5 cm. Distinct and regular figures. Bailey collection	21.5	7.50
1854	**Werchne Udinsk,** Transbaikalia, Siberia. Medium octahedrite, Om. Polished slice 2.5 x 2.5 x 0.3 cm. Typical figures. Bailey collection	16.8	8.40
1836	**Wichita,** Wichita Co., Texas. Coarse octahedrite, Og. Complete section, polished 26 x 16.5 x 0.8 cm. Coarse distinct figures, eight large troilite nodules inclosed by graphite and schreibersite. Parallel flakes of schreibersite very numerous. See plate X	2100.	250.00
	The Wichita iron was worshipped by aborigines prior to its removal from the place		

PLATE V.

Amalia Farm, Near Gibeon, German Southwest Africa. (Probably the same as Mukerop.) Finest Octahedrite. Mass weighing 392 Kilos from which listed Slices were cut. x 0.18 Diameters. See Pages 16 and 44.

Found.	Name, Locality, Classification, Symbol, Average Dimensions, Description.	Grams.	Price. $
	of its discovery by whites. Beautiful slices of 50 to 400 grams, at $0.18 to $0.14 per gram, according to weight, dimensions and troilite inclusions.		
1884	**Youndegin,** West Australia, Broad octahedrite, Og. Polished, wedge-shaped slice 4 x 2 x 0.1 cm. Structure very indistinct. Bailey collection	12.1	1.50

Supplementary

Oxidized Meteoric Iron

Cañon Diablo altered to limonite—magnetic shale, mass 7 x 5.5 x 2.5 cm.	383.	1.00
ditto, mass, 6 x 5 x 2 cm.....	216.	.75

Meteoritic Minerals

Schreibersite from Tombigbee River siderite. Lot	1.	5.00

Terrestrial Iron

Disco Island, Greenland. Native iron. Mass	550.	25.00
ditto	315.	15.00
ditto	192.	7.00
ditto	77.	5.00
ditto	48.	3.00
ditto	34.	2.00
Josephine Co., Oregon. Josephinite. Nickel-iron. Lot of pebbles.....	80.	4.00
ditto	40.	2.00
Awarua Bay, New Zealand. Awaruite. Nickel-iron. In grains. Lot.....	5.	5.00

Casts

Holbrook	4.00
Kilbourn	2.00
Kingston	4.00

PART II

Single Specimens not for Sale

THE FOOTE COLLECTION OF METEORITES

Rose-Tschermak-Brezina Classification

Arrangement. The following system of classifying meteorites was built up mainly through the labors of Rose, Tschermak, Cohen and Brezina. It has been entirely rejected by a few authorities and criticized by all, on account of its fundamental weakness in basing many sub-groups on physical characters which may vary in different parts of the same piece. Color, form of stony chondrules, veining and thickness of crystalline iron laminae, are certainly variables of questionable utility in any classification. Although it is very likely to be superseded by a quantitative or other more scientific method, and at least greatly altered for the better, it is employed here because its symbols are in almost universal use at the present time.*

The group names, symbols and group descriptions, are as published in 1904 by Dr. Aristides Brezina in the Proceedings of the American Philosophical Society, Vol. 53, No. 176, pp. 211 to 247. In the following transcript some unimportant errors of translation are corrected.

In bold type appear the catalog number and name, then reference and description, with value and weight of the representative specimen contained in the collection.

Especial Features. Attention is called to the large complete sections of the beautifully crystallized irons from Sacramento Mts., Kingston, Tombigbee River, Wichita, and Amalia Farm. The Kilbourn stone which struck a Wisconsin barn last year is shown in an end piece. Other equally rare falls here included in good specimens are: Manbhoom, Charlotte, Great Fish River, Mantos Blancos, Emmitsburg, Jackson County, Murfreesboro, Victoria, Summit, Kokomo, Linnville and Senegal. Mr. Bailey's original labels accompany these and many other specimens.

Historic localities are well represented by Ensisheim, Kesen, La Caille, Medwedewa, L'Aigle, Casas Grandes and Mazapil.

*A private letter just received, states that a revision of the Rose-Tschermak system will be published at the end of 1913. The Leucituranolite will be omitted as being of Vesuvian origin. The exclusion of veining as a basis of sub-classification, is recommended, since it is contrary to petrographic usage.

While the Bailey rarities constitute the nucleus and chief excellence of the collection, its greatest individual superiority lies in the series of over two thousand complete boloids from the very recent and most wonderful stone shower near Holbrook, Arizona, July 19th, 1912. (Described, November, 1912, Foote: Am. Jour. Science, Ser. 4, Vol. 34, pp. 437-456.) It is a debatable question as to whether the fall is identified with some stragglers from the Perseid swarm of August meteors, visible from July 11th to August 22nd. This suite includes all of the specimens described in the preliminary note referred to and is among the finest series illustrative of a meteoritic shower, to be found in any collection in the world.

The Holbrook fall permitted the selection and preservation of an illustrative type series from among fourteen thousand individuals —an opportunity which occurs only a few times in the course of a century. It invites the fullest investigation and study of one of the most important meteoritic showers on record.

Extent of Collection. There are 205 localities represented. Of aerolites there are 89, of siderolites and mesosiderites 14, and of siderites 102. The total weight is 35,988 grams, the average weight per fall being 175 grams. The average price of all specimens is $0.16 per gram. The preceding figures do not include the supplementary list. Among private collections of meteorites, it is the fourth largest in the world.

Sale. As the collection was brought together primarily for our own reference needs, specimens are not sold separately. The total of the individual values, including the supplementary specimens, aggregates $6,001.95. The net cash price for the collection, delivered to any address in the world, is $5,000.

Exchanges. We desire to secure specimens to illustrate localities that are unrepresented, and to replace by larger pieces, many specimens that are already included. It is desired to represent each meteoritic shower by a large and varied series. A fair wholesale price will be allowed for desiderata and payment made in meteorites from our sales stock as listed in Part I of this catalog, or in minerals and rocks. (Catalog on request. See page 64.)

Orders for Single Specimens will be recorded, and as duplicates are received they will be offered to those who have requested them. If a collection catalog or a desiderata list is sent us, collectors are sure of having some of the gaps filled that are to be found in every collection.

Index and Gram Price of localities is given at the end of the catalog.

Aerolites or Stones—Silicates Prevailing

A. Achondrites

Stones poor in nickel-iron,

essentially without round chondrules.

Grams.

Chladnite, Chl. Chiefly Bronzite.

Chladnite, Veined, Chla. Bronzite with black or metallic veins.

1. **Bishopville,** Sumter Co., South Carolina. Fell March 25, 1843. Described, Shepard, 1846, Am. Jour. Sc., Ser. 2, Vol. 2, pp. 379, 384, 392. Whitish with rusty spots. Fragments, $8.30. Bailey collection 1.7

Angrite, A. Chiefly Augite.

Chassignite, Cha. Chiefly Olivine.

2. **Chassigny,** Haute-Marne, France. Fell October 3, 1815. Described, Pisvollet, 1816, Ann. Chim. Phys., Vol. 1, pp. 45-48. Light yellow, friable, specked with black. Fragments and crust, $4.20. Bailey collection 0.6

Bustite, Bu. Bronzite with Augite.

Amphoterite, Am. Bronzite with Olivine.

3. **Jelica,** Jelica Mts., Servia. Fell December 1, 1889. Described, Doell, 1890, Verh. k. k. geol. Reichsanst., pp. 70-77. Light gray, few large metallic grains, friable, bluish gray nodules, ¼ incrusted. Fragment, 3.2 x 2 x 1.2 cm., $21.00. Bailey collection ..... 14.

4. **Manbhoom,** Bengal, India. Fell December 22, 1863. Described, Haidinger, 1864, Sitzber. Wien. Akad., Vol. 50, pp. 241-246. Light gray, the bronzite coarsely crystalline. Piece, 3 x 1.7 x 1 cm., $42.00. Bailey collection 14.2

Rodite, Ro. Bronzite with Olivine, breccia-like.

5. **Vavilovka,** Government of Kherson, South Russia. Fell June 19, 1876. Described, Prendel, 1877, Mém. de la Soc. Nation. des Sciences Nat., Cherbourg, T. 21, p. 205. Light gray, with rusty spots. Piece, 1.7 x 1 x 0.6 cm., $13.50. Bailey collection 2.7

Eukrite, Eu. Augite with Anorthite.

6. **Juvinas,** Dep. Ardêche, France. Fell June 15, 1821. Described, Jules de Malbos, 1821, Akadémie des Sciences, Ann. Chim. Phys., T. 17, pp. 434-439. Gray, crystalline, many dark grains in white glassy ground mass. Piece, 2 x 1.3 x 1.2 cm., $2.40 ..... 4.4

7. **Stannern,** Moravia, Austria. Fell May 22, 1808. Described, v. Jacquin, 1808, Gilb. Ann., Vol. 28, p. 491. Light gray, coarse granuar, ½ incrusted, glassy black crust. Piece, 2.7 x 1.2 x 1 cm., $2.25 ..... 5.7

Grams.

Shergottite, She. Augite with Maskelynite.

Howardite, Ho. Bronzite, Olivine, Augite and Anorthite.

8. **Frankfort,** Franklin Co., Alabama. Fell December 5, 1868. Described, Brush, 1869. Am. Jour. Sc., Ser. 2, Vol. 48, pp. 240-244. Light gray with black and white grains. Slice, 1.2 x 1.4 x 0.2 cm., $8.40 ..... 1.2

9. **Petersburg,** Lincoln Co., Tennessee. Fell August 5, 1855. Described, Smith, 1855, in Safford's Report on Geology of Tennessee, Nashville, Tenn. Light gray, granular with minute metallic grains, one-third incrusted, glassy black. Piece, 1.4 x 1.2 x 1 cm., $35.00. Bailey collection 3.5

Howardite, Breccia-like, Hob. Bronzite, Olivine, Augite and Anorthite, breccia-like.

Leucituranolite, L.* Leucite, Anorthite, Augite and glass.

B. Chondrites

Bronzite, Olivine and Nickel-iron, with round or rounded and polyhedric chondrules.

Howarditic Chondrite, Cho. Polyhedric segregations prevailing, round chondrules scarce. Crust partly bright.

Howarditic Chondrite, Veined, Choa. Polyhedric segregations prevailing, round chondrules scarce. Black or metallic veins.

White Chondrite, Cw. White, rather friable mass with few, mostly white chondrules.

10. **Cabezzo de Mayo,** Murcia, Spain. Fell August 18, 1870. Described, D. Juan de Velasco, 1870, El Tiempo, Nr. 247, October 20, 1870. Light gray, fine metallic grains. Piece, 2.2 x 1.2 x 0.7 cm., $18.00. Bailey collection 4.5

11. **Mordvinovka,** Government of Ekaterinoslaw, South Russia. Fell May 19, 1826. Described, Arch. des Découvertes, 1826, p. 186. Light gray with rusty spots and shining metallic grains. Fragments, $1.60. Bailey collection 0.8

12. **Tourinnes-la-Grosse,** near Louvain, Belgium. Fell December 7, 1863. Described, Van Beneden, 1863, Bull. Acad. Roy. Belgique, T. 16, p. 621. Light gray, minute metallic grains. Piece, 2 x 1.8 x 0.8 cm., $5.30. Bailey collection ..... 6.

White Chondrite, Veined, Cwa. White, rather friable mass with few, mostly white chondrules; black or metallic veins.

13. **Forsyth,** Monroe Co., Georgia. Fell May 8, 1829. Described, Silliman, 1830, Am. Jour. Sc., Ser. 1, Vol. 18, p. 388. Light gray with rusty spots and fine metallic grains. Fragment, 0.8 x 0.7 x 0.4 cm., $1.00. Bailey collection 0.5

* Leucituranolite has recently been shown to be of Vesuvian origin.

Grams.

14. **Girgenti,** Sicily, Italy. Fell February 10, 1853. Recorded, Greg, 1854, Philos. Mag., p. 460, London. Gray, very fine grained with bright metallic grains. Piece, 4 x 3 x 2 cm., $60.00.... 29.

15. **Honolulu,** Island of Oahu, Hawaiian Islands. Fell September 27, 1825. Described, Kotzebue, 1823-1826, Reise um die Welt in den Jahren, 1823-24-25-26. Gray, fine grained with metallic grains. Piece, 1 x 1 x 0.5 cm., $3.00..... 1.5

16. **Marion,** Linn Co., Iowa. Fell February 25, 1847. Described, Shepard, 1847, Am. Jour. Sc., Ser. 2, Vol. 4, pp. 288, 429. Light gray, rusty spots with large metallic grains. Crust. Polished slice, 5.7 x 2.7 x 1.2 cm., $18.00 ..... 45.

17. **Mocs,** Transylvania, Austria-Hungary. Fell February 3, 1882. Described, Hauer, 1882, Verh. k. k. geol. Reichsanst., 1882, pp. 77-78. Light gray, rusty spots with metallic grains. Half of complete individual, ¾ incrusted, 5 x 4 x 3 cm., $14.00. Bailey collection ..... 151.

ditto, complete individual, almost completely incrusted, showing primary and secondary crust, 2.5 x 1.5 x 1.1 cm., $1.00 ..... 8.

18. **Wold Cottage,** County of York, England. Fell December 13, 1795. Described, Topham, Gentleman's Magazine, February 8, 1796. Light gray with coarse and fine grains. Piece, 2 x 1.7 x 0.7 cm., $20.00. Bailey collection 7.7

White Chondrite, Breccia-like, Cwb. White, rather friable mass with few chondrules, mostly white, breccia-like.

19. **Pacula,** Hidalgo, Mexico. Fell June 18, 1881. Described, Castillo, 1889. Catalog. Descr. des Météorites du Mexique, pp. 12-15. Light gray, rusty spots with minute metallic grains. Piece, 3.5 x 1.5 x 1 cm., $37.50. Bailey collection.... 12.5

Intermediate Chondrite, Ci. Firm, polishable mass with white and gray chondrules breaking with matrix.

20. **Alfianello,** Brescia, Italy. Fell February 16, 1883. Described, Bombicci, 1883, Reale Academia dei Lincei, 1882-1883, p. 11. Ash gray; fine grained with easily visible metallic grains. Crust. Piece, 4.6 x 4.6 x 2.5 cm., $14.00. Bailey collection. 135.

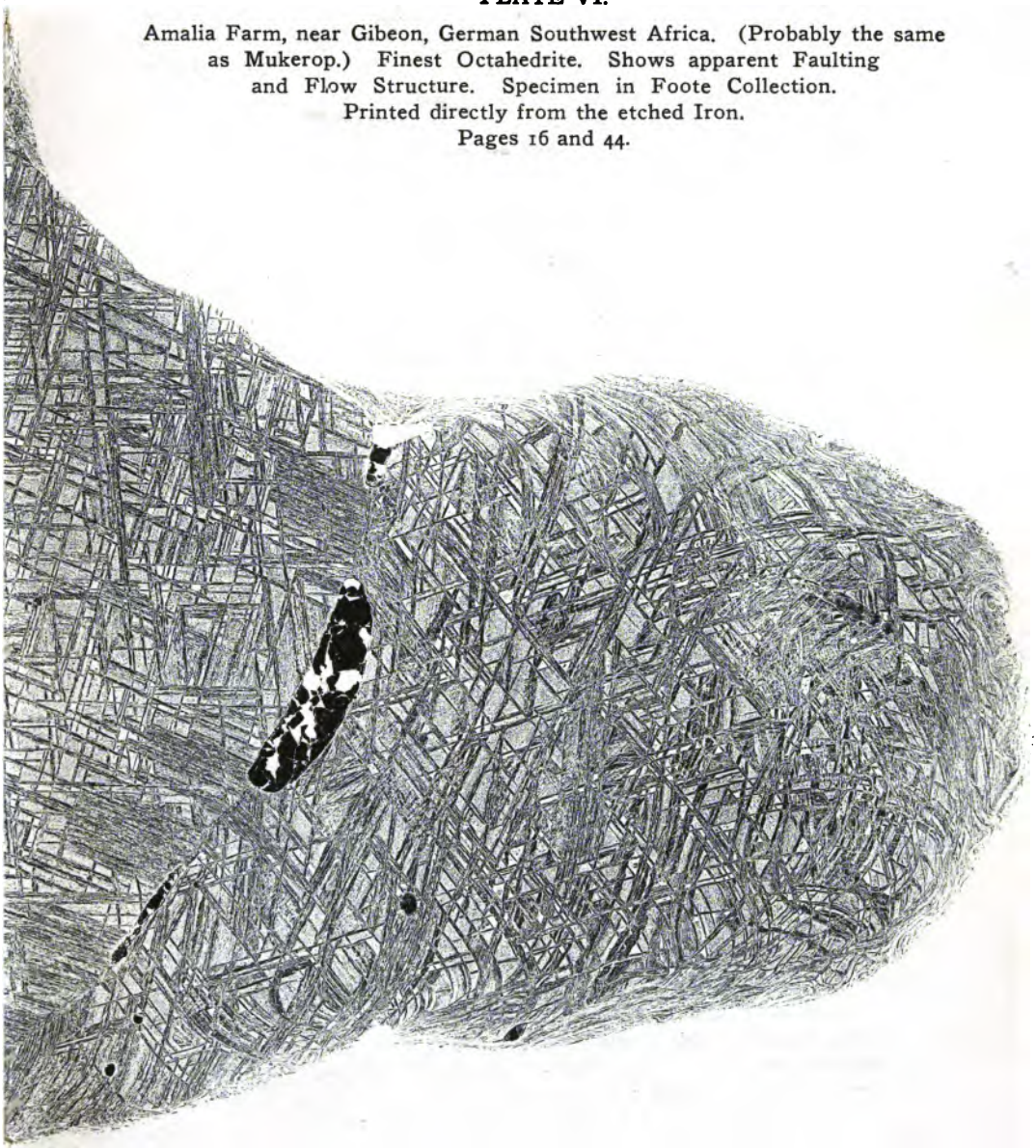
21. **Dhurmsala,** Punjaub, India. Fell July 14, 1860. Recorded, 1862, Jour. Geol. Soc. Dublin, Vol. 10, P. 1, pp. 7-11. Gray with large, rusty grains and bluish gray nodules. Crust. Piece, 3 x 3 x 1.7 cm., $8.25. Bailey collection ..... 59.

Intermediate Chondrite, Veined, Cia. Firm, polishable mass with white and gray chondrules breaking with the matrix; black or metallic veins.

22. **Agen,** Lot et Garonne, France. Fell September 5, 1814. Described, M. de Saint-Amans, and M. Thiébaut de Berneaud, September 17, 1814, Ann. Chim., J. 92, pp. 25-32. Gray with small metallic grains. Fragments $3.00 ..... 3.

PLATE VI.

Amalia Farm, near Gibeon, German Southwest Africa. (Probably the same as Mukerop.) Finest Octahedrite. Shows apparent Faulting and Flow Structure. Specimen in Foote Collection.
Printed directly from the etched Iron.
Pages 16 and 44.



Grams.

23. **Duruma,** Wanikaland, East Africa. Fell March 7, 1853. Described, Greg, Philos. Magaz., Vol. 24, p. 538. Grayish brown with rusty spots. Fragment, 1 x 0.4 x 0.2 cm., $1.20. Bailey collection 0.3

24. **Lancon,** Bouches du Rhône, France. Fell June 20, 1897. Described, Meunier, 1900, Comptes Rendus, T. 31, pp. 969-972. Gray, uniform texture with numerous shining metallic grains. Piece, 1.7 x 1.2 x 0.7 cm., $3.70 ..... 4.5

25. **Long Island,** Phillips Co., Kansas. Found 1891. Recorded, Farrington, 1895, Catal. of Meteorites, Field Col. Museum, Pub. No. 3, p. 59. Fine grained structure, dark greenish, rusted reddish brown with brown crust and slickensided surface. Piece, 7.2 x 4.7 x 3.5 cm., $33.00. Bailey collection. 392.

26. **Zavid,** Bosnia, Austria. Fell August 1, 1897. Described, Berwerth, 1901, Wissensch. Mitt. aus Bosnien und der Hercegovina, Bd. 8, pp. 1, 18. Gray with minute metallic grains. Piece, 4 x 3 x 2 cm., $9.20 ..... 23.

Intermediate Chondrite, Breccia-like, Cib. Firm, polishable mass, white and gray chondrules breaking with matrix; breccia-like.

27. **L'Aigle,** Orne, France. Fell April 26, 1803. Described, Biot, 1803, Mem. de l'Institut, T. 7, p. 224. Brownish, porphyry-like with fine metallic grains. Half of complete individual ¾ incrusted, 5.8 x 2.2 x 2 cm., $13.50. Bailey collection.... 74.6

28. **Ness County,** Kansas. Found 1897. Described, H. L. Ward, Am. Jour. Sc., Ser. 4, Vol. 7, p. 233. Dark gray with numerous metallic grains. Crust. Polished slice, 4.5 x 1.8 x 0.6 cm., $1.00 ..... 15.

Gray Chondrite, Cg. Firm, gray mass, chondrules of various kinds breaking with matrix.

29. **Cynthiana,** Harrison Co., Kentucky. Fell January 23, 1877. Described, Smith, 1877, Am. Jour. Sc., Ser. 3, Vol. 14, pp. 224-229. Bluish gray with rusty spots and large metallic grains. Piece, 1.8 x 1.6 x 0.6 cm., $3.50. Bailey collection.. 3.5

30. **Knyahinya,** near Nagy-Berezna, Austria-Hungary. Fell June 9, 1866. Described, Haidinger, 1866, Sitzber., Wien. Akad., Vol. 54, pp. 200-205. Brownish gray with numerous metallic grains. End piece two-thirds incrusted, polished face, 4.5 x 3.5 x 2.5 cm., $14.00 ..... 143.

31. **Shelburne,** Ontario, Canada. Fell August 13, 1904. Described, Borgström, Trans. Roy. Astron. Soc. of Canada, 1904, pp. 69-94. Light gray, spotted rusty brown with numerous metallic grains. Large crust. Piece, 6.6 x 3 x 2.8 cm., $30.00 ..... 117.5

Grams.

Gray Chondrite, Veined, Cga. Firm, gray mass, chondrules of various kinds breaking with matrix; black or metallic veins.

32. **Barbotan,** Landes, France. Fell July 24, 1790. Described, Bertholon, 1790, Jour. des Sci. utiles, Nr. 23 and 24, p. 305. Rusty with numerous minute metallic grains. Fragments, $1.00 ..... 1.

33. **Charsonville,** Loiret, France. Fell November 23, 1810. Described, Moniteur, December, 1810, extract in Bibl. Brit., Vol. 45, Nr. 360, pp. 397-400. Gray with rusty spots and abundant metallic grains. Piece, 3.5 x 1.5 x 0.6 cm., $3.50... 7.1

34. **Danville,** Morgan Co., Alabama. Fell November 27, 1868. Described, Smith, 1870, Am. Jour. Sc., Ser. 2, Vol. 49, pp. 90-93. Gray with fine metallic grains. Fragment, $0.60. Bailey collection 0.1

35. **Kilbourn,** Columbia Co., Wisconsin. Fell June 16, 1911. Studied by Farrington. Gray, rusted brownish; thickly disseminated metallic grains with numerous round and polyhedral chondrules. Dull crust. See plate I. End piece, polished, 4 x 4.5 x 2 cm., $430.00 ..... 86.

36. **Lixna,** Kurland, Russia. Fell July 12, 1820. Described, Plater-Seiberg, 1820, Allg. Deutsche Zeitung fuer Russland, No. 180, July 28, 1820, Mitau, Kurland. Light gray with shining metallic grains. Piece, 1.3 x 0.8 x 0.4 cm., $1.00 ..... 1.

Gray Chondrite, Breccia-like, Cgb. Firm, gray mass, chondrules of various kinds breaking with matrix; breccia-like.

37. **Castalia,** Nash Co., North Carolina. Fell May 14, 1874. Described, Kerr, 1875, Rep. Geol. Surv., North Carolina, Vol. 1, App., p. 313. Grayish black somewhat rusted. Crust. Polished slice, 3.8 x 2.6 x 0.8 cm., $24.00. Bailey collection. 24.

38. **Chantonnay,** Vendée, France. Fell August 5, 1812. Described, Chladni, 1819, Vierte Fortsetzung, Gilb. Ann., Vol. 60, pp. 239, 247, 248. Gray with crust. Fragments, $1.00 ..... 2.

39. **Homestead,** Iowa Co., Iowa. Fell February 12, 1875. Described, Hinrichs, 1875, Popular Sci., September, 1875. Gray with numerous large metallic grains. Half covered by thin crust with broad pits. Polished end piece, 9 x 3 x 1 cm., $12.50. Bailey collection ..... 123.

40. **Pultusk,** Poland, Russia. Fell January 30, 1868. Described, Szymanski, 1868, Briefl. Mitt. N. J. 1868, p. 326. Gray with numerous large, rusty metallic grains. Half incrusted. End piece, polished face, 8.5 x 5.5 x 2.5 cm., $20.00. Bailey collection ..... 324.
ditto, complete individual, 2 x 1.4 x 0.8 cm., $0.50..... 6.

Orvinite, Co. Black infiltrated mass, fluidal texture; surface uneven, crust incomplete.

Grams.

41. Orvinio, Perugia, Italy. Fell August 31, 1872. Described, Ferrari, 1872, Richerche fisico-astronomiche intorno, all uranolito cadutu nell'agro Romano il 31, Agosto, Roma. Dark gray brown with minute metallic grains. Fragments, $9.00. Bailey collection 2.9

Tadjerite, Ct. Black, semi-glassy, crust-like mass with similar surface.

42. Tadjera, Constantine, Algeria. Fell June 9, 1867. Described, Augeraud, 1867, Comptes Rendus, T. 65, pp. 240-242. Dark ground mass. Piece, $1.00 ..... 0.2

Black Chondrite, Cs. Dark or black mass, chondrules of various kinds breaking with matrix.

43. MacKinney, Collin Co., Texas. Found 1870. Described, v. Hauer, Ann. Hof-Mus., Vol. 10, p. 34. Dull black with large metallic grains, compact. Polished slice, 9.5 x 3.3 x 1.2 cm., $11.00. Bailey collection ..... 136.

Black Chondrite, Veined, Csa. Dark or black mass, chondrules of various kinds, breaking with matrix; black or metallic veins.

44. Farmington, Washington Co., Kansas. Fell June 25, 1890. Described, Snow, 1890, Sc., Vol. 16, pp. 38-39. Grayish black with white radiated chondrules and large metallic grains. Polished slice, 2 x 2 x 0.7 cm., $1.00..... 13.

Ureilite, U. Black mass, chondritic or granular; iron in veins or incoherent.

45. Novo-Urei, Kazan, Russia. Fell September 22, 1886. Recorded, v. Jerofeieff and v. Latschinoff, 1887, Nature, Vol. 37, pp. 110-111. Black. Small fragments, $3.60. Bailey collection 0.9

Carbonaceous Chondrite, K. Dull black, friable chondrite with free carbon, low specific gravity, metallic iron nearly or wholly lacking.

46. Alais, Gard, France. Fell March 15, 1806. Described, Pages et Dhombres-Firmas, 1806, Jour. Phys., T. 62, pp. 440-442. Brownish black, very friable. Small fragments, $21.00..... 3.

47. Cold Bokkeveld, Cape Colony, Africa. Fell October 13, 1838. Described, Maclear and Watermeyer, 1839, Phil. Trans. Royal Soc., London, 1839, Vol. 1, pp. 83-85. Black with white specks, resembles graphite, bituminous odor. Fragments, $6.00 ..... 4.

48. Mighei, Kherson, South Russia. Fell June 18, 1889. Described, v. Siemaschko, 1890, Nature, Vol. 41, p. 272. Black, bituminous odor, earthy graphitic with chondrules of lighter color distributed through the mass. Scoriaceous crust. Piece, 2 x 1.7 x 1.2 cm., $8.70 ..... 7.

Grams.

49. **Nagaya,** Entre Rios, Argentina. Fell July 1, 1879. Described, Websky, 1882, Sitzber. Berlin. Akad. 1882, pp. 395, 396. Black with few white chondrules, slightly bituminous odor. Piece, 2 x 1 x 9.6 cm., $3.50. Bailey collection 1.7

50. **Orgueil,** Tarn et Garonne, France. Fell May 14, 1864. Described, Rose, 1864, Meteoriten, pp. 126, 156. Soft and black. Small fragments, $1.00 ..... 1.

Carbonaceous Chrondrite, Spherical, Kc. Dull gray or black, friable mass with free carbon; chondrules not breaking with matrix; Nickel-iron.

Carbonaceous Chondrite, Spherical, Veined, Kca. Dull black firm mass with free carbon; chondrules not breaking with matrix; metallic veins.

51. **Indarch,** Trans-Caucasia, Russia. Fell April 7, 1891. Described, Siemaschko, 1891, Catalogue de la Collection des Météorites de Julien de Siemaschko, St. Petersburg, 1891, pp. 55-56. Much oxidized fragments $2.60 ..... 2.9

Spherical Chondrite, Cc. Friable mass with firm radiated chondrules, not breaking with matrix.

52. **Albareto,** Modena, Italy. Fell July, 1766. Described, Troili, 1766, Della Caduta di un sasso dall aria, Modena. Light gray with bluish gray chondrules. Piece, 1.4 x 1 x 1 cm., $5.00. Bailey collection ..... 2.

53. **Assisi,** Perugia, Italy. Fell May 24, 1866. Described, Bellucci, 1887, Tipografia di Vincenzo Santucci, Perugia, 1887. Light gray with darker chondrules and rusty spots. Fragments $3.00. Bailey collection ..... 3.

54. **Ausson,** Haute Garonne, France. Fell December 9, 1858, Comptes Rendus, T. 47, pp. 1053-1055. Gray with rusty spots. Piece 3 x 1.3 x 0.5 cm., $4.50 ..... 8.

55. **Cape Girardeau,** Cape Girardeau Co., Missouri. Fell August 14, 1864. Described, Dana and Penfield, 1886, Am. Jour. Sc., Ser. 3, Vol. 32, pp. 229-230. Rusty gray with small metallic grains. Thin crust. Piece, 2 x 1.7 x 1.2 cm., $22.00. Bailey collection ..... 11.

56. **Hessle,** Upsala, Sweden. Fell January 1, 1869. Described, Fahnehjelm, 1869, Oefversigt af Vetensk. Akad. Foerhandl. Nro. 1, pp. 59-60. Gray with minute metallic grains. End piece, ¾ incrusted, 3 x 2.8 x 1.2 cm., $11.50. Bailey collection 30.2

57. **Le Pressoir,** Indre-et-Loir, France. Fell January 25, 1845. Described, Daubrée, 1881, Comptes Rendus, T. 88, pp. 544-547. Light gray with rusty spots and metallic grains. Fragments $7.50. Bailey collection 2.5

Grams.

58. **Little Piney,** Pulaski Co., Missouri. Fell February 13, 1820. Described, Herrick, 1839, Am. Jour. Sc., Ser. 1, Vol. 37, pp. 385-386. Light gray with fine metallic grains. Fragments, $1.50. Bailey collection 0.3

59. **Misshof,** Kurland, Russia. Fell April 10, 1890. Described, Doss, 1891, Arbeiten des Naturf. Ver., Riga, N. F., Heft 7. Light gray with rusty spots and metallic grains. Piece, 2 x 1.5 x 1.2, $8.00 ..... 12.

60. **Nanjemoy,** Charles Co., Maryland. Fell February 25, 1825. Described, Carver, 1825, Am. Jour. Sc., Ser. 1, Vol. 9, pp. 351-353. Light gray, somewhat friable, with abundant metallic grains. Piece, 4 x 2 x 2 cm., $60.00..... 21.

61. **Quenggouk,** Lower Burmah, India. Fell December 27, 1857. Described, Haidinger, 1860, Sitzber. Wien. Akad., Vol. 41, pp. 750-751. Light gray with dark chondrules. Crust. Piece, $17.25. Bailey collection 17.2

62. **Searsmont,** Waldo Co., Maine. Fell May 21, 1871. Described, Shepard, 1871, Am. Jour. Sc., Ser. 3, Vol. 2, pp. 133-136. Light gray with minute metallic grains. Crust. Fragments, $6.00. Bailey collection 2.3

63. **Timochin,** Smolensk, Russia. Fell March 25, 1807. Described, Gilbert, 1807, Gilb. Ann., Vol. 26, pp. 238-239. Gray brown with large metallic grains. Slice, 2 x 1.5 x 0.4 cm., $2.50. Bailey collection 3.4

64. **Tomatlan,** Jalisco, Mexico. Fell September 17, 1879. Described, Shepard, 1885, Am. Jour. Sc., Ser. 3, Vol. 30, pp. 105-108. Light gray with dark chondrules. Fragment, $1.35 ..... 0.9

Spherical Chondrite, Veined, Cca. Friable mass with firm radiated chondrules, not breaking with matrix; black or metallic veins.

65. **Bjurböle,** Southern Finland, Russia. Fell March 12, 1899. Described, Ramsay and Borgström, 1902, Bull. de la Commis. Géol. de Finlande, No. 12, Helsingfors, Finland. Light gray with large, dark chondrules. Metallic grains scarce. Piece, 3.5 x 2.5 x 1.5 cm., $3.25 ..... 40.

66. **Trenzano,** Brescia, Italy. Fell November 12, 1856. Described, Curioni, 1860, Atti R. Instit. Lomb. di Scienze, Lettere et Arti. Milano, 1860, T. 1, pp. 357-364. Coarse grained, gray with many rusty spots and dark chondrules. Piece, 2 x 1.7 x 0.8 cm., $5.00 ..... 7.

Spherical Chondrite, Breccia-like, Ccb. Friable, breccia-like mass with firm radiated chondrules, not breaking with matrix.

67. **Forest,** Winnebago Co., Iowa. Fell May 2, 1890. Described, Torrey and Barbour, 1890, Am. Jour. Sc., Ser. 3, Vol. 39,

Grams.

pp. 521-522. Completely incrusted individual with nearly flat faces and rounded angles. Crust brownish black, 7 x 4.5 x 3.5 cm., $25.00. Bailey collection ..... 312.

68. **Heredia,** Costa Rica, Central America. Fell April 1, 1857. Described, Harris, 1859, Dissert. Goett., pp. 99-100. Light gray. Small crust. Piece, 1.3 x 1.1 x 0.4 cm., $6.65 ..... 1.9

69. **Kesen,** Hondo, Japan. Fell June 13, 1850. Described, H. A. Ward, Am. Jour. Sc., Ser. 3, Vol. 45, pp. 153-155. Dark gray brown, sprinkled with rusty iron grains. Small crust. Piece, 2.8 x 2.4 x 1 cm., $4.25 ..... 17.8

70. **Mooresfort,** Tipperary, Ireland. Fell August, 1810. Described, Higgins, 1811, Philos. Magaz., Vol. 38, pp. 262-268. Ash gray with coarse metallic grains. Fragments, $1.80. Bailey collection 0.9

71. **Ploschkowitz,** Bunzlau, Bohemia. Fell June 22, 1723. Described, Rost, 1725, Sammlung von Natur und Medecin, etc., Geschichten (Breslauer Samml.), 31 Versuch, Winter Quartal, 1725, pp. 44-47. Brownish fragment with crust, 2 x 1 x 0.4 cm., $27.00. Bailey collection 2.7

72. **Tabor,** Bechin, Bohemia. Fell June 3, 1753. Described, Stebling, 1754, De pluvia lapidea Anni 1753 ad Strkow et eius causis meditatio. Typis Francisci Ignatii Kirchner. Prag, 1754, 33 pages. Light gray. Fragments, $1.00. Bailey collection 0.9

73. **Tabory,** Perm, Russia. Fell August 30, 1877. Described, Daubrée, 1887, Comptes Rendus, T. 105, pp. 987-988. Gray with metallic grains. Piece, 3 x 2.5 x 1.3 cm., $4.75. Bailey collection 23.4

74. **Waconda,** Mitchell Co., Kansas. Found 1873. Described, Shepard, 1876, Am. Jour. Sc., Ser. 3, Vol. 11, p. 473. Gray with rusty spots and metallic grains. Piece, 3 x 1.5 x 1.2 cm., $1.30 ..... 11.

Ornansite, Cco. Friable mass of chondrules.

75. **Allegan,** Allegan Co., Michigan. Fell July 10, 1899. Described, H. L. Ward, 1899, Am. Jour. Sc., Ser. 4, Vol. 8, pp. 412-414. Few metallic grains, chondrules readily separable. Crust. Piece, 5 x 2.4 x 2 cm., $7.75 ..... 42.4

76. **Elm Creek,** Lyon Co., Kansas. Found 1906. Described, Howard, Am. Jour. Sc., 1907, Ser. 4, Vol. 23, p. 379. Blackish brown with numerous large and small metallic grains. Crust. Polished section, 5.5 x 2.5 x 0.8 cm., $6.75 ..... 30.2

77. **Ornans,** Doubs, France. Fell July 11, 1868. Described, Pisani, 1868, Comptes Rendus, Vol. 67, pp. 663-665. Bluish gray with fine chondrules. Piece, 2.2 x 1.2 x 0.7 cm., $15.20. Bailey collection 3.8

Grams.

78. **Warrenton,** Warren Co., Missouri. Fell January 3, 1877. Described, Smith, 1877, Am. Jour. Sc., Ser. 3, Vol. 13, p. 243. Resembles a piece of sandstone, few metallic grains visible. Piece, 2 x 1 x 1 cm., $20.00 ..... 5.

Ngawite, Ccn. Friable breccia-like mass of chondrules.

Spherical Chondrite, Crystalline, Cck. Slightly friable, crystalline mass with hard radiated chondrules, some breaking with matrix.

79. **Beaver Creek,** West Kootenai District, British Columbia, Canada. Fell May 26, 1893. Recorded, Howe, 1893, Science, Vol. 12, No. 546, p. 41. Dark brownish gray with small, glassy chondrules, and many fine metallic grains. Piece, 3.9 x 2.3 x 1.7 cm., $57.00. Bailey collection ..... 57.

80. **Bethlehem,** Albany Co., New York. Fell August 11, 1859. Described, Shepard, 1859, Am. Jour. Sc., Ser. 2, Vol. 28, pp. 300-303. Dark gray with rusty spots. Fragment, $5.00.... 0.5

81. **Holbrook,** Navajo Co., Arizona. Fell July 19, 1912. Described, Foote, November, 1912, Am. Jour. Sc., Ser. 4, Vol. 34, pp. 437-456.

The first twelve individuals constitute a complete type series of specimens selected from over fourteen thousand, as being the best representatives for illustrating the fall. The figures referred to below, appear in the above mentioned description in the American Journal of Science. (Reprint sent on request.) See plate III, Fig. 1 and cover illustration.

Complete angular individual with primary and secondary crust. Broken corner shows half separated spherical chondrule 1.1 cm. diameter, 16 x 8.5 x 7 cm. Fig. 14 ..... 2460.

ditto, complete individual (reconstructed). Deeply channeled radial fusion flow on front. Scoriaceous overflow fringing the back, 13 x 13 x 5 cm. Figs. 6 and 7 ..... 2400.

ditto, nearly complete individual with freshly fractured corner. Uncharred vegetable fibre is firmly imbedded in rough crust, 13 x 8.5 x 7.5 cm. ..... 1900.

ditto, nearly complete individual with pit formed by burning out of pyrrhotite nodule, a slaggy remnant remaining, 11 x 7 x 5 cm. Fig. 10 ..... 1345.

ditto, complete individual, with deeply channeled radial flow on front. Two rear corners broken and thinly fused over. Fringe-like overflow on back, 9 x 6 x 5 cm. Fig. 3.. 720.

ditto, complete flat individual, showing fine radial lines on smooth front, overflowing on back in a scoriaceous fringe. Confirmatory soil line on edge shows depth of partial burial, 11 x 7 x 2.5 cm. Figs. 11 and 12 ..... 600.

ditto, complete individual, rusted by rain below a well marked soil line; strongly crackled above. Direction of soil line plainly indicates oblique angle of flight, 8.5 x 6 x 0.4 cm. Fig. 4 ..... 500.

Grams.

ditto, complete angular individual (reconstructed). Secondary crust only; deeply furrowed radial lines on front, overflowing on back in exceptionally thick brecciated scoria, bearing unfused fragments of stone, 7 x 6.5 x 3.5 cm. ..... 450.

ditto, complete rectangular individual, with primary, secondary and tertiary crusts, formed after successive explosions. The last crust consists partly of a smoky alteration of the fresh fracture, 6 x 4 x 3.5 cm. Fig. 5 ..... 270.

ditto, fragment showing fresh fracture and large pyrrhotite nodule, 6.5 x 6 x 2.5 cm. Fig. 13 ..... 235.

ditto, complete individual. Well marked radial flow on primary crust of original smooth front. Stone was apparently reversed in flight after explosion, as radial flow is well marked on secondary crust of an angular front opposite the original, 4.5 x 4.5 x 2 cm. Figs. 8 and 9 ..... 135.

ditto, polished specimen. Metallic grains and chondritic structure; one chondrule encircled by metal, 4.5 x 4 x 0.6 cm. Fig. 15 ..... 30.

ditto, lot of 2000 complete individuals ranging from 0.1 gram to 320 grams each. This includes a lot of 360 stones of 0.1 to 0.3 gram each, shown in Fig. 2. Most of the characteristics of the preceding 12 large specimens, are reproduced in these smaller stones ..... 6000.

Total 2012 specimens, 17,015 grams (with two microscopic slides, Figs. 16 and 17), $1000.

82. Saline, Sheridan Co., Kansas. Fell November 15, 1898. Described, Farrington, 1902, Sc., Vol. 16, pp. 67, 68. Blackish, compact with abundant metallic grains. Polished slice with crust, 8 x 5.7 x 1 cm., $27.00 ..... 134.2

Spherical Chondrite, Crystalline, Veined, Ccka. Slightly friable, crystalline, veined mass with firm, radiated chondrules, some breaking with matrix.

Spherical Chondrite, Crystalline, Breccia-like, Cckb. Slightly friable, crystalline, breccia-like mass with firm, radiated chondrules, some breaking with matrix.

Crystalline Chondrite, Ck. Hard crystalline mass with firm, radiated chondrules breaking with matrix.

83. Daniels Kuil, Griqualand, South Africa. Fell March 20, 1868. Described, Gregory, 1868, Geol. Magaz., Vol. 5, pp. 531-532. Dark gray with metallic grains. Piece, 1.5 x 1 x 0.5 cm., $10.00 ..... 2.

84. Djati Pengilon, Ngawi, Java. Fell March 19, 1884. Described, Verbeck and Retgers, 1886, Jaarbock van het Mijnwezen Nederlandsch Oost-Indie Wetens. Ged., Vol. 15, pp. 145-171. Dark gray with very abundant metallic grains. Piece, 2.5 x 2 x 0.4 cm., $7.00. Bailey collection ..... 7.

Grams.

85. Kermichel, Morbihan, France. Fell June 30, 1903. Described, Meunier, 1912. Dark brownish with small metallic grains. Reddish crust. Polished slice, 3.7 x 2.5 x 1.4 cm., $63.00.... 44.9

Crystalline Chondrite, Veined, Cka. Hard crystalline, veined mass with firm, radiated chondrules, breaking with matrix.

86. Estacado, Hale Co., Texas. Found 1892. Described, Howard, Am. Jour. Sc., 1906, Ser. 4, Vol. 22, p. 55. Dark gray, very fine grained, with minute metallic grains. Piece, 6.5 x 3 x 0.4 cm., $1.35 ..... 24.

87. Kernouvé, Morbihan, France. Fell May 22, 1869. Described, de Limur, 1869, Comptes Rendus, T. 68, pp. 1338-1339. Dark gray, compact, with minute rusty metallic grains. Crust. Piece, 3 x 1.2 x 0.6 cm., $1.70 ..... 4.

Crystalline Chondrite, Breccia-like, Ckb. Hard, crystalline breccia-like mass with firm, radiated chondrules, breaking with matrix.

88. Bluff, Fayette Co., Texas. Found 1878. Described, Whitfield and Merrill, 1888, Am. Jour. Sc., Ser. 3, Vol. 36, pp. 113-119. Dark greenish brown, fine texture, scattered metallic grains. Polished piece, 4.5 x 2.7 x 1 cm., $2.40 ..... 44.

89. Ensisheim, Elsass, Germany. Fell November 16, 1492. Described, Sebastian Brand, 1492 (a Latin song with translation). Dark gray, fine grained; black, smooth and shining in patches. Piece, 3 x 2 x 1 cm., $13.50. Bailey collection.. 13.5

C. Enstatite-Anorthite-Chondrites

Enstatite, Anorthite and Nickel-iron with round chondrules.

Crystalline Enstatite-anorthite Chondrite, Cek. Hard crystalline mass with firm, radiated chondrules.

D. Siderolites

Transitions from stones to irons. Nickel-iron in the mass cohering; on sections separated.

Mesosiderite, M. Crystalline, Olivine and Bronzite.

90. Dona Inez, Atacama, Chile. Found 1888. Described, Howell, 1890, Proc. Roch. Acad. of Sc., Vol. 1, pp. 93-98. Stony matter of dark brown predominating. Polished slice, 3 x 1.8 x 1 cm., $2.75 ..... 16.

91. Estherville, Emmet Co., Iowa. Fell May 10, 1879. Described, Peckham, 1879, Am. Jour. Sc., Ser. 3, Vol. 18, pp. 77-78. Complete individual, 4.5 x 1.5 x 1.3 cm., $5.00. Bailey collection 38.4

ditto, stone and iron equally divided, polished end piece, 6 x 4 x 2 cm., $16.00 ..... 123.9

Grams.

92. **Llano del Inca,** Atacama, Chile. Found 1888. Described, Howell, 1890, Proc. Roch. Acad. of Sc., Vol. 1, pp. 93-98. Stone and iron equally divided. Polished piece, 2.8 x 1.8 x 1.5 cm., $1.40. 23.

93. **Mincy,** Taney Co., Missouri. Found 1860. Described, Shepard, 1860, Am. Jour. Sc., Ser. 2, Vol. 30, pp. 205-206. Silicates and metal equally abundant. Polished piece, 4 x 1.2 x 1 cm., $3.75 ..... 21.

94. **Veramin,** near Teheran, Persia. Fell February, 1880. Described, Dietsch, 1881, Berg-und Huettenm. Zeitung, Vol. 40, p. 100. Stony matter dark gray. Polished piece, 1.5 x 0.7 x 0.6 cm., $1.40 ..... 0.7

Grahamite, Mg. Crystalline Olivine, Bronzite and Plagioclase.

95. **Crab Orchard,** Cumberland Co., Tennessee. Found 1887. Described, Whitfield, 1887, Am. Jour. Sc., Ser. 3, Vol. 34, pp. 387-390. Metallic grains small and evenly divided. Specimen, 4 x 3 x 3 cm., $8.80 ..... 80.

96. **Mejillones,** Atacama, Chile. Found 1874. Described, Domeyko, 1875, Comptes Rendus, T. 87, pp. 597-598. Nickel-iron is distributed as a fine network. Polished slice, 7 x 5 x 4 cm., $37.00 ..... 37.

97. **Morristown,** Hamblen Co., Tennessee. Found 1887. Described, Eakins, 1893, Am. Jour. Sc., Ser. 3, Vol. 46, pp. 283-285. Somewhat oxidized, stone and iron in equal quantities. Piece, 2.5 x 1.5 x 0.7 cm., $1.60. Bailey collection ..... 8.

98. **Vaca Muerta,** Atacama, Chile. Found 1861. Described, Domeyko, 1862, Comptes Rendus, T. 55, pp. 873-874. Grains are of different sizes. Polished slice, 3 x 2.5 x 0.3 cm., $3.00. 11.5

Lodranite, Lo. Granular-crystalline Olivine and Bronzite.

E. Lithosiderites

Transition from stones to irons. Nickel-iron cohering in mass and on sections.

Siderophyre, Si. Grains of Bronzite with accessory Asmanite in the Trias.

Pallasite, Krasnojarsk group, Pk. Rounded crystals of Olivine in the Trias.

99. **Medwedewa,** Jeniseisk, Central Siberia. Found 1749. Described, Pallas, 1776, Reisen durch verschiedene Provinzen des russischen Reichs, St. Petersburg, Part 3, p. 411. Spongiform piece, 3 x 2 x 0.7 cm., $3.00 ..... 12.

Pallasite, Rokicky group, Pr. Polyhedral crystals of Olivine partly broken, and fragments separated by Nickel-iron.

100. **Admire,** Lyon Co., Kansas. Found 1881. Described, 1902, Merrill, Proceedings of U. S. National Museum, Vol. 24, pp. 907-913. Half oxidized piece, 8 x 4.5 x 3 cm., $27.00..... 270.

Grams.

101. **Ahumada,** Chihuahua, Mexico. Found 1909. Studied by Farrington. Well defined six-sided crystals of greenish-black to yellowish olivine, mostly 1-2 cm. diameter, strikingly contrasted in a coarsely crystallized nickel-iron. Shown in plate IV. Polished slice of uniform thickness, 9.5 x 7 x 0.9 cm., $70.00 ..... 277.

Pallasite, Imilac group, Pi. Olivine crystals cracked and compressed.

102. **Imilac,** Atacama, Chile. Found 1882. Described, Allan, 1828, Edinburgh Philos. Trans., Vol. 11, pp. 223-226. Somewhat rusted piece, 1.8 x 1.8 x 0.3 cm., $1.00 ..... 5.2

Pallasite, Albach group, Pa. Olivine crystals in fine brecciated Trias.

103. **Bitburg** (Albacher Muehle), Rhenish Prussia. Found 1802. Described, Gibbs, 1814, Bruce's Am. Mineralogical Jour., Vol. 1, pp. 219-221. Large pores and slag-like surface, formed by melting in furnace. Polished piece of uniform thickness, 2.8 x 2.2 x 0.8 cm., $3.00 ..... 25.7

F. Octahedrites

Kamacite, Taenite and Plessite (Trias), in lamellæ and concamerations of the four octahedron faces.

Finest Octahedrite, Off. Lamellæ up to 0.2 mm. thickness.

104. **Amalia** Farm, near Gibeon, German South West Africa. Found 1910. Well defined straight figures, which at three ends curve in a strongly marked flow structure. A large troilite nodule lies in a fusion-line of apparent joining or faulting, the crystallization showing in different angles on either side. Numerous smaller nodules and rods of troilite. Complete section of uniform thickness etched, 24 x 14 x 0.7 cm., $100.00 (probably identical with Mukerop, which ordinarily sells in small pieces at $0.12 per gram). Shown in plate VI. 1793.

ditto, complete section, showing flow structure, 12 x 8.5 x 0.3 cm., $12.00 ..... 208.

ditto, polished piece, with oxidized exterior, 6 x 3.5 x 2.5 cm., $7.50 ..... 206.

105. **Bacubirito,** Sinaloa, Mexico. Found 1871. Described, H. A. Ward, 1902, Proc. Rochester Acad. Sci., Vol. 2, pp. 67-74. Figures plainly defined. Polished, wedge-shaped slice, 3 x 2 x 0.2 cm., $2.75 ..... 11.

106. **Ballinoo,** Murchison River, West Australia. Found 1892. Described, H. A. Ward, 1898, Am. Jour. Sc., Ser. 4, Vol. 5, pp. 136-137. Figures easily discernible, small troilite. Polished slice of uniform thickness, 3.8 x 2.2 x 0.4 cm., $3.75. Bailey collection ..... 31.

Grams.

107. **Carlton,** Hamilton Co., Texas. Found 1887. Described, Howell, 1890, Proc. Rochester Acad. of Science, Vol. 1, pp. 87-89. Distinct figures. Polished slice of uniform thickness, 2 x 1.6 x 0.3 cm., $1.00 ..... 10.

108. **Mungindi,** Southern Queensland, Australia. Found 1897. Described, Card, 1897, Rec. Geol. Surv. N. S. Wales, Vol. 5, p. 121. Beautifully marked figures. Polished slice of uniform thickness, 4.5 x 2.4 x 0.4 cm., $5.00. Bailey collection. 34.2

109. **Salt River,** Bullitt Co., Kentucky. Found 1850. Described, Silliman, Jr., 1850, Proc. Am. Assoc. Science, Vol. 4, pp. 36-37. Figures minute but distinct. Polished slice, 2 x 1.5 x 0.6 cm., $34.00 ..... 17.

Fine Octahedrite, Victoria group, Ofv. Lamellæ of Troilite and Schreibersite in fine Trias.

Fine Octahedrite, Of. Thickness of lamellæ 0.2-0.4 mm.

110. **Augustinovka,** Ekaterinoslav, Russia. Found 1890. Described, Alexejev, 1893, Ver. russ. Min. Ges., Vol. 2, pp. 30 and 470. Figures with schreibersite. Polished slice of uniform thickness, 5 x 1.4 x 0.4 cm., $5.25. Bailey collection 20.7

111. **Bear Creek,** Jefferson Co., Colorado. Found 1866. Described, Shepard, Am. Jour. Sc., Ser. 2, Vol. 42, pp. 250-251. Four fragments, $6.75 ..... 8.

112. **Bella Roca,** Durango, Mexico. Found 1888. Described, Whitfield, 1889, Am. Jour. Sc., Ser. 3, Vol. 37, pp. 439-440. Perfect figures, large troilite and numerous flakes of schreibersite. Almost complete polished section of uniform thickness, 16 x 6 x 0.6 cm., $80.00 ..... 431.

113. **Bridgewater,** Burke Co., North Carolina. Found 1890. Described, Kunz, 1890, Am. Jour. Sc., Ser. 8, Vol. 40, pp. 320-322. Beautiful and symmetrical figures with much taenite. Polished slice of uniform thickness, 5.3 x 2.4 x 0.4 cm., $50.00. Bailey collection 41.8

114. **Cambria,** Niagara Co., New York. Found 1818. Described, Silliman, 1845, Am. Jour. Sc., Ser. 1, Vol. 48, pp. 388-392. With apparent faulting, two troilite nodules surrounded by schreibersite. Polished slice of uniform thickness, 2.8 x 2.8 x 0.5 cm., $25.00. Bailey collection 33.7

115. **Charlotte,** Dickson Co., Tennessee. Fell August 1, 1835. Described, Troost, 1845, Am. Jour. Sc., Ser. 1, Vol. 49, pp. 337-340. Figures somewhat dimmed by granulation. Polished slice of uniform thickness, 3.3 x 2 x 0.4 cm., $65.00. Bailey collection 18.4

116. **Grand Rapids,** Kent Co., Michigan. Found 1883. Described, Eastman, 1884, Am. Jour. Sc., Ser. 3, Vol. 28, pp. 299-300.

Grams.

Striking figures. Polished slice, 3 x 2 x 0.4 cm., $2.75. Bailey collection 17.8

117. **Great Fish River,** Cape Colony, South Africa. Found 1836. Reported, Sir Alexander, 1838, Exp. of Discov. to Interior of Africa, Vol. 2, Appd., p. 272. Showing no figures. End piece, 1.8 x 1.5 x 0.7 cm., $27.00. Bailey collection 10.8

118. **Jamestown,** Stutsman Co., North Dakota. Found 1885. Described, Huntington, 1890, Proc. Amer. Acad. Arts and Sciences, Vol. 25, pp. 229-232. Figures imperfect and rather dimly outlined. Half of a complete section of uniform thickness, 6 x 2.1 x 0.4 cm., $36.00. Bailey collection 44.8

119. **La Grange,** Oldham Co., Kentucky. Found 1860. Described, Smith, 1861, Am. Jour. Sc., Ser. 2, Vol. 31, p. 151. Distinct figures, narrow, kamacite bordered by thin plates of taenite. Polished slice, 2.7 x 2.5 x 0.4 cm., $12.50. Bailey collection 20.6

120. **Lion River,** Great Namaqualand, South Africa (probably the same as Mukerop). Found 1853. Described, Shepard, 1853, Am. Jour. Sc., Ser. 2, Vol. 15, pp. 1-4. Beautiful figures, plates narrow and very distinct. Polished, wedge-shaped slice, 3.5 x 3.3 x 0.1 cm., $6.75. Bailey collection 17.6

121. **Mantos Blancos,** Atacama, Chile. Found 1876. Described, Fletcher, 1889, Mineral. Mag., Vol. 8, pp. 224, 230, 257, 258. Characteristic figures. End piece polished, 2 x 1.8 x 0.6 cm., $20.00. Bailey collection 13.2

122. **Obernkirchen,** Westphalia, Prussia. Found 1863. Described, Woehler and Wicke, 1863, Goett. Gel. Anz. (Nachr.), 1863, pp. 364-367. Typical figures. Polished, wedge-shaped slice, 3.5 x 1.9 x 0.4 cm.. $15.50. Bailey collection 20.6

Fine Octahedrite, Molten, Ofe. Figures disordered by melting; points instead of Troilite lamellæ.

Medium Octahedrite, Om. Thickness of lamellæ 0.5-1 mm.

123. **Abert Iron,** locality unknown. From old collection of Col. J. J. Abert. Described, Riggs, 1887, Bull. U. S. Geol. Surv., No. 42, pp. 95-96. Distinct figures. Polished slice of uniform thickness, 2.8 x 1.4 x 0.2 cm., $18.00 ..... 6.7

124. **Arlington,** Sibley Co., Minnesota. Found 1894. Described, Winchell, 1896, Am. Geologist, Vol. 18, No. 5, pp. 267-271. Well defined figures. Polished slice of uniform thickness, 1.7 x 1.5 x 0.6 cm., $3.25 ..... 13.5

125. **Carthage,** Smith Co., Tennessee. Found 1844. Described, Troost, 1846, Am. Jour. Sc., Ser. 2, Vol. 2, pp. 356-357. Distinct figures. Polished end piece, 3 x 1.6 x 0.3 cm., $2.50... 10.2

126. **Casas Grandes,** Chihuahua, Mexico. Prehistoric. Recognized 1867. Described, Tarayre, 1867, Archiv. de la Com. Sci. du

Grams.

Mexique, Vol. 3, p. 348. Typical figures, little taenite. Polished slice, 7 x 4 x 1 cm., $17.00 ..... 126.

127. **Charcas,** San Luis Potosi, Mexico. Found 1814. Described, Sonneschmid, 1804, Mineralog. Beschreibung der vorzueglichsten Bergwerks-Reviere in Mexico oder Neuspanien, p. 288. Medium to broad lamellæ. Polished end piece, 1.5 x 1.3 x 0.4 cm., $1.00 ..... 4.2

128. **Cleveland,** Bradley Co., Tennessee. Found 1860. Described, Shepard, 1866, Am. Jour. Sc., Ser. 2, Vol. 43, p. 251. Striking figures. Polished slice of uniform thickness, 4.5 x 2.8 x 0.5 cm., $15.50. Bailey collection 51.6

129. **Colfax,** Rutherford Co., North Carolina. Found 1880. Described, Eakins, 1890, Am. Jour. Sc., Ser. 3, Vol. 39, pp. 395-396. Highly crystalline, octahedral cleavage. Polished slice, 6 x 3 x 0.5 cm., $60.00..... 61.

130. **Coopertown,** Robertson Co., Tennessee. Found 1860. Described, Smith, 1861, Am. Jour. Sc., Ser. 2, Vol. 31, p. 266. Lamellæ 2 mm. thick (making this particular specimen a coarse octahedrite), little schreibersite. Polished slice of uniform thickness, 3.2 x 1.3 x 0.4 cm., $12.50. Bailey collection 12.5

131. **Costilla Peak,** Taos Co., New Mexico. Found 1881. Described, Hills, 1895, Proc. Colorado Scientific Soc., p. 1. Characteristic figures. Polished slice of uniform thickness, 3 x 2.6 x 0.3 cm., $3.60 ..... 20.

132. **Dalton,** Whitfield Co., Georgia. Found 1877. Described, Smith, 1877, Am. Jour. Sc., Ser. 3, Vol. 14, p. 246. Well marked figures with short lamellæ. Polished slice, 3 x 3 x 0.3 cm., $8.25. Bailey collection ..... 26.

133. **Descubridora,** San Luis Potosi, Mexico. Found 1780. Described, Del Rio, 1804, Tablas Mineralogicas, p. 57, Mexico, 1804. Figures in long bands cross each other at nearly right angles. Polished slice of uniform thickness, 4 x 3 x 0.4 cm., $4.75. Bailey collection 41.8

134. **Emmitsburg,** Frederick Co., Maryland. Found 1854. Described, Brezina, 1885, Wiener Sammlung, pp. 211-234. Excellent figures with medium to broad lamellæ. Polished end-piece, 3 x 2 x 0.5 cm., $87.50. Bailey collection 17.5

135. **Fort Pierre,** Stanley Co., South Dakota. Found 1856. Reported, Chouteau, 1858, Trans. St. Louis Acad. of Science, Vol. 1, p. 307. Characteristic figures. Polished, wedge-shaped slice, 2.5 x 2.2 x 0.4 cm., $15.00 ..... 16.2

136. **Franceville,** El Paso Co., Colorado. Found 1890. Described, Preston, 1902, Proc. Rochester Acad. of Science, Vol. 4, pp. 75-78. Well marked figures. Polished slice of uniform thickness, 2.5 x 2.2 x 0.3 cm., $1.40 ..... 14.3

Grams.

137. **Glorieta Mountain,** Santa Fe Co., New Mexico. Found 1884. Described, Kunz, 1885, Am. Jour. Sc., Ser. 3, Vol. 30, p. 235. Beautiful figures, coarse to fine lamellæ. Polished slice of uniform thickness, 4.2 x 2.7 x 0.3 cm., $3.75. Bailey collection 30.2

138. **Jackson County,** Tennessee. Found 1846. Described, Troost, 1846, Am. Jour. Sc., Ser. 2, Vol. 2, p. 357. Well defined cleavage octahedron with oxidized exterior. Cleavage, 2.5 x 1.5 x 1.2 cm., $40.00 ..... 13.2

139. **Kenton Co.,** Kentucky. Found 1889. Described, Preston, 1892, Am. Jour. Sc., Ser. 3, Vol. 44, pp. 163-164. Figures typical but slightly dim. Polished end piece, 8.5 x 3.5 x 1 cm., $12.00. Bailey collection ..... 200.

140. **Kingston,** Sierra Co., New Mexico. Found 1891. Described by Hovey. Distinct figures which become clouded by granulation at one end, as illustrated in plate VII. Several troilite nodules and rods. Complete section of uniform thickness, polished, 16 x 8 x 0.4 cm., $160.00..... 320.

141. **La Caille,** Var, France. Found 1828. Described, Brard, 1828, Minéralogie, under Article, "Fer." Typical figures. Polished slice of uniform thickness, 4.7 x 1.4 x 0.3 cm., $12.00. Bailey collection 15.3

142. **Lenarto,** Saros, Hungary. Found 1814. Described, Tehel, 1815, Gilb. Ann., Vol. 49, pp. 181-182. Distinct figures. Polished slice of uniform thickness, 3.4 x 1.4 x 0.4 cm., $3.35. Bailey collection 13.4

143. **Luis Lopez,** Socorro Co., New Mexico. Found 1896. Described, Preston, 1900, Am. Jour. Sc., Ser. 4, Vol. 9, pp. 283-285. Small figures. Polished slice, 3 x 2 x 0.4 cm., $6.25. Bailey collection 20.9

144. **Mazapil,** Zacatecas, Mexico. Fell November 27, 1885, during a shower of Leonid meteors. Described, Hidden, 1887, Am. Jour. Sc., Ser. 3, Vol. 33, pp. 494-499. Well defined figures with short lamellæ, some schreibersite. Polished slice, 4 x 2.5 x 0.4 cm., $200.00. Bailey collection 36.5

145. **Merceditas,** near Chanaral, Northern Chili. Found 1884. Described, Howell, 1890, Proc. Roch. Acad. of Science, Vol. 1, p. 99. Striking figures of long lamellæ at nearly right angles, troilite. Polished slice, 4.5 x 2.7 x 0.2 cm., $6.00. Bailey collection 24.2

146. **Misteca,** Oaxaca, Mexico. Found 1804. Described, Del Rio, 1804, Tablas Mineralog., p. 57. Medium to broad lamellæ, showing much taenite. Polished slice of uniform thickness, perforated, 6 x 2.3 x 0.5 cm., $6.50. Bailey collection..... 42.1

147. **Murfreesboro,** Rutherford Co., Tennessee. Found 1847. Described, Troost, 1848, Am. Jour. Sc., Ser. 2, Vol. 5, pp. 351-

PLATE VII.

Kingston, Sierra Co., New Mexico. Found 1891. Medium Octahedrite showing distinct and clouded Figures. x 1. Diameter. See Pages 20 and 48.

Grams.

352. Well marked figures. Polished slice, 3.5 x 2.1 x 0.3 cm., $22.00. Bailey collection 17.3

148. **Nocoleche,** Wanaaring, New South Wales. Found 1895. Described, Cooksey, 1897, Records Austr. Mus., Vol. 3, No. 3, pp. 51-54. Interrupted figures, lamellæ mostly broad. Polished slice, 4.5 x 2.2 x 0.3 cm., $11.30. Bailey collection..... 22.6

149. **Plymouth,** Marshall Co., Indiana. Found 1893. Described, H. A. Ward, 1895, Am. Jour. Sc., Ser. 3, Vol. 49, pp. 53-55. Distinct figures. Polished slice of uniform thickness, 3.5 x 3 x 0.3 cm., $7.50 ..... 24.7

150. **Puquios,** Copiapo, Chili. Found 1885. Described, Howell, 1890, Am. Jour. Sc., Ser. 3, Vol. 40, pp. 224-226. Beautifully marked figures, medium to broad lamellæ, troilite nodule. Polished slice, 5.7 x 4 x 0.6 cm., $61.00. Bailey collection ..... 108.

151. **Rodeo,** Durango, Mexico. Found 1850. Studied by Farrington. Distinct figures. Polished slice, 8 x 7 x 1 cm., $55.00.. 379.

152. **Roebourne,** Queensland, Australia. Found 1892. Described, H. A. Ward, 1898, Am. Jour. Sc., Ser. 4, Vol. 5, pp. 135-136. Distinct figures, clouded by granulation in one part. Polished slice of uniform thickness, 4.5 x 2 x 0.4 cm., $4.25. Bailey collection 34.2

153. **Ruff's Mountain,** Lexington Co., South Carolina. Found 1844. Described, Shepard, 1850, Am. Jour. Sc., Ser. 2, Vol. 10, p. 128. Irregular figures. Polished slice of uniform thickness, 3.3 x 2 x 0.2 cm., $2.75 ..... 12.5

154. **Russell Gulch,** Gilpin Co., Colorado. 1863. Described, Smith, 1866, Am. Jour. Sc., Ser. 2, Vol. 42, pp. 218-219. Characteristic figures with little taenite, large troilite nodule. Polished slice of uniform thickness, 4 x 4 x 0.6 cm., $85.00.. 85.4

155. **Sacramento Mountains,** Eddy Co., New Mexico. Found 1896. Described, Foote, 1897, Am. Jour. Sc., Ser. 4, Vol. 3, pp. 65-66. Shows typical, beautifully outlined figures, two very large troilite nodules and large, deep oxidized pit. Complete section, polished, 40 x 10.5 x 0.8 cm., $140.00. See plates VIII and IX ..... 2710.

156. **San Angelo,** Tom Green Co., Texas. Found 1897. Described, Preston, 1898, Am. Jour. Sc., Ser. 4, Vol. 5, pp. 269-272. Inintersecting lamellæ, interspersed with rectangular bundles of parallel lamellæ. Polished slice of uniform thickness, 5.4 x3 x 0.3 cm., $4.50 ..... 44.

157. **Staunton,** Augusta Co., Virginia. Found 1858. Described, Mallet, 1871, Am. Jour. Sc., Ser. 3, Vol. 2, pp. 10-15. Well defined figures. Polished slice of uniform thickness, 4.9 x 4.1 x 0.3 cm., $7.50. Bailey collection 62.5

PLATE VIII.

Sacramento Mountains, Eddy Co., New Mexico. Found 1896. Medium Octahedrite. Mass of 237 Kilos from which listed Specimens were cut to show deep Pitting. x 0.18 Diameters. See Pages 22 and 50.

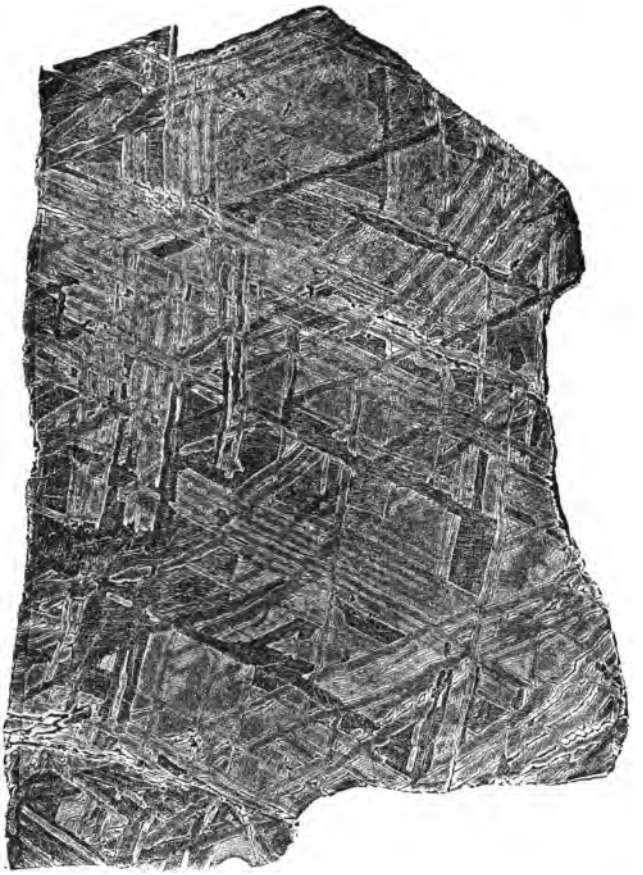


PLATE IX.

Sacramento Mountains, Eddy Co., New Mexico. Found 1896. Medium Octahedrite. (Printed from an Electrotype made directly from the etched Iron.)

See Pages 22 and 50.

Grams.

158. **Toluca,** State of Mexico, Mexico. Found 1784. Described, Del Rio, 1804, Tablas Mineralogicas, 1804, p. 57. Medium to coarse lamellæ, schreibersite. Complete section of uniform thickness, polished, 8.5 x 6 x 0.8 cm., $7.00..... 294.

159. **Trenton,** Washington Co., Wisconsin. Found 1858. Described, Doerflinger, 1868, Smithson. Rep. for 1869, pp. 417-419. Beautiful figures, interrupted by coarsest lamellæ. Polished, wedge-shaped slice, 4.8 x 3.8 x 0.2 cm., $5.75 ..... 41.2

160. **Victoria,** Saskatchewan, Canada. Found 1871. Described, Coleman, 1886, Proc. and Trans. Roy. Soc. of Canada, 1887, Vol. 4, Secs. 3, 97. Characteristic figures with much taenite in damascened triangles. Polished slice of uniform thickness, 2.8 x 1.5 x 0.4 cm., $33.00. Bailey collection 11.8

161. **Welland,** Ontario, Canada. Found 1888. Described, Howell, 1890, Proc. Roch. Acad. of Science, Vol. 1, pp. 86-87. Characteristic figures with much taenite. Polished slice, 2.5 x 2 x 0.5 cm., $6.00. Bailey collection 18.2

162. **Werchne Udinsk,** Transbaikalia, Siberia. Found 1854. Described, Rose, 1863, Meteoriten, pp. 65, 153. Clearly outlined figures. Polished slice, 3 x 2 x 0.2 cm., $7.40. Bailey collection 14.8

Medium Octahedrite, Molten, Ome. Figures disordered by melting; points instead of taenite lamellæ.

Coarse Octahedrite, Og. Thickness of lamellæ 1.5-2.0 mm.

163. **Bendego,** Bahia, Brazil. Found 1784. Described, Mornay, 1816, Phil. Trans., pp. 270-280. Imperfect figures with some very coarse lamellae. Polished slice, 4.5 x 3 x 0.5 cm., $5.75. Bailey collection 44.5

164. **Bischtübe,** Turgai, Siberia. Found 1888. Described, Kislakovsky, 1890, Bull. Soc. Imp. des Naturalistes de Moscou, Nr. 2, pp. 187-199. Characteristic figures. Polished slice of uniform thickness, 3.7 x 1.2 x 0.9 cm., $2.80. Bailey collection ..... 28.

165. **Cañon Diablo,** Coconino Co., Arizona. Found 1891. Described, Foote, 1891, Am. Jour. Sc., Ser. 3, Vol. 42, pp. 413-417. Complete individual. Oxidized and much pitted exterior, 16 x 10 x 5 cm., $30.00 ..... 2000.

ditto, half of a complete individual, one end polished, indistinct figures, 4.5 x 4.5 x 1 cm., $4.50 ..... 136.

166. **Casey County,** Kentucky. Found 1877. Reported, Smith, 1877, Am. Jour. Sc., Ser. 3, Vol. 14, p. 246. Imperfect figures. Polished slice of uniform thickness, 3 x 1.5 x 0.2 cm., $8.80 ..... 6.3

167. **Cranbourne** (Beaconsfield), Mornington, Victoria, Australia. Found 1897. Described, Cohen, 1897, Sitzungsber. Koenigl.

Grams.

Preuss. Acad. der Wissensch., Berlin. Octahedral cleavage discernible. Irregular figures, troilite nodule. Polished slice of uniform thickness, 6 x 3 x 0.9 cm., $11. Bailey collection 98.8

168. **Cranbourne,** near Melbourne, Victoria, Australia. Found 1854. Described, Haidinger, 1861, Wien. Acad. Ber., Vol. 43, Abteil. 2, p. 583. Oxidized piece, 5.5 x 4 x 1 cm., $8.00 ..... 145.

169. **Cosby's Creek,** Cocke Co., Tennessee. Found 1837. Described, Troost, 1840, Am. Jour. Sc., Ser. 1, Vol. 38, pp. 250-254. Figures very irregular, broad to broadest lamellæ, troilite. Polished slice, 6.5 x 4 x 0.4 cm., $7.00. Bailey collection.... 68.

170. **Jenny's Creek,** Wayne Co., West Virginia. Found 1883. Described, Kunz, 1885, Proc. Amer. Assoc., Vol. 34, p. 246. Fragments, $4.40 ..... 11.

171. **Magura,** Arva, Hungary. Found 1840. Described, Haidinger, 1844, Wiener Zeitung, April 17, 1844. Some lamellæ very coarse. Polished end-piece, 3.8 x 2 x 1 cm., $4.75 ..... 46.

172. **Mount Sterling,** near York, West Australia. Found 1892. Recorded, Etheridge, Jr., 1897, Records Australian Museum, Vol. 3, No. 3, p. 58. Irregular figures with some very coarse lamellæ. Complete section, polished, 4 x 2.2 x 0.3 cm., $4.75. Bailey collection 28.2

173. **Oscuro Mountains,** Socorro Co., New Mexico. Found 1895. Described, Hills, 1897, Proc. of Colorado Scientific Soc., 1897, pp. 1-4. Figures irregular, striking schiller lustre, troilite nodule. Polished slice, 5 x 4 x 0.2 cm., $9.20. Bailey collection ..... 23.

174. **Silver Crown,** Laramie Co., Wyoming. Found 1887. Described, Kunz, 1888, Am. Jour. Sc., Ser. 3, Vol. 36, pp. 276-277. Irregular figures, mostly coarsest lamellæ, troilite. Polished slice of uniform thickness, 4.3 x 2.7 x 0.6 cm., $11.50. Bailey collection ..... 49.

175. **Smithville,** De Kalb Co., Tennessee. Found 1840. Described, Brezina, 1895, Ann. d. K. K. Nat. Hofmus, pp. 285-286. Beautiful figures, large troilite nodule inclosed by graphite. Schreibersite. Half of a complete section of uniform thickness, polished, 10.5 x 8 x 0.8 cm., $45.00 ..... 511.

176. **Wichita,** Wichita Co., Texas. Found 1836. Described, Shumard, 1860, Trans. Acad. of Science, St. Louis, Vol. 1, pp. 622-623. Brilliant, large figures with eight 1 to 2 cm. troilite nodules inclosed by graphite and schreibersite. Parallel flakes of schreibersite very numerous. Complete section, polished, 26 x 16.5 x 0.8 cm., $250.00. See plate X.. 2100.

177. **Youndegin,** West Australia. Found 1884. Described, Fletcher, 1887, Mineralog. Magaz., Vol. 7, pp. 121-130. Indistinct, coarsest lamellæ, without arrangement, granulated. Pol-

PLATE X.

Wichita, Wichita Co., Texas. Coarse Octahedrite. 1836. Pages 24 and 54.

Grams.

ished slice of uniform thickness, 4 x 2 x 0.3 cm., $2.00. Bailey collection ..... 17.

Coarse Octahedrite, Molten, Oge. Figures disordered by melting; points instead of taenite lamellæ.

178. **Reed City,** Osceola Co., Michigan. Found 1895. Described, Preston, 1903, Proc. Rochester Acad. Science, Vol. 4, pp. 89-91. Coarse figures with slender and branching inclusions of schreibersite. Polished slice, 18 x 9 x 0.6 cm., $240.00 ..... 600.

Coarsest Octahedrite, Ogg. Thickness of lamellæ 2.5 mm. and more.

179. **Arispe,** Sonora, Mexico. Found 1898. Described, H. A. Ward, 1902, Proc. Rochester Acad. Science, Vol. 4, pp. 79-88. Shows tendency to separate in octahedral cleavage. Regular figures with lamellæ 3 to 10 mm. thick. Polished section of uniform thickness, 6.2 x 5.2 x 0.5 cm., $11.50 ..... 115.

180. **Mount Joy,** Adams Co., Pennsylvania. Found 1892. Described, Howell, 1892, Am. Jour. Sc., Ser. 4, Vol. 44, pp. 415-416. Very coarse structure. Polished slice, 3.7 x 1.7 x 0.8 cm., $3.75. Bailey collection ..... 37.

181. **Nelson County,** Kentucky. Found 1860. Described, Smith, 1860, Am. Jour. Sc., Ser. 2, Vol. 30, p. 240. Lamellæ 2 to 15 mm., irregularly arranged. Polished slice, 4 x 3 x 0.3 cm., $4.75.. 31.8

182. **Sao Juliao de Moreira,** Minho, Portugal. Found 1883. Described, Ben-Saude, 1888, Comm. de commis. dos Trab. Geol. de Portugal, Vol. 2, pp. 14-16. Structure indistinct. Polished end piece, 4 x 2 x 0.5 cm., $3.50 ..... 24.7

183. **Seeläsgen,** Brandenburg, Prussia. Found 1847. Described, Goeppert, 1847, Verh. Berlin. Akad., 1847, p. 488. Very coarse, irregular figures. Polished slice, 5.3 x 3.3 x 0.6 cm., $15.00. Bailey collection 79.8

184. **Union County,** Georgia. Found 1853. Described, Shepard, 1854, Am. Jour. Sc., Ser. 2, Vol. 17, p. 328. Coarse structure. Polished piece, 1.7 x 1 x 0.6 cm., $6.25. Bailey collection.... 5.

Breccia-like Octahedrite, Netschajevo group, Obn. Medium Octahedrite with nodules of silicate.

185. **Tula** (Netschajevo), Tula, Russia. Found 1846. Described, Auerbach, 1858, Bull. de la Soc. Imp. des Naturalistes, Moskou, Vol. 31, pp. 331-332. Schiller-like lustre. Polished slice of uniform thickness, 3 x 3 x 0.5 cm., $25.00. Bailey collection. 27.2

Breccia-like Octahedrite, Kodaikanal group, Obk. Fine Octahedrite brecciated with nodules of silicate.

Breccia-like Octahedrite, Copiapo group, Obc. Coarsest Octahedrite brecciated with silicate-nodules.

Breccia-like Octahedrite, Zacatecas group, Obz. Octahedral nodules breccia-like, with spherules of troilite.

Grams.

186. **Barranca Blanca,** Pass through the Cordilleras, Chile. Found 1855. Described, Fletcher, 1889, Mineralog. Magazine, Vol. 8, pp. 224, 262-263. Typical structure. Polished end-piece, 2 x 1.5 x 0.5 cm., $10.25. Bailey collection 10.2

Breccia-like Octahedrite, N'Goureyma group, Obzg. Molten and drawn out iron of the Zacatecas group.

187. **N'Goureyma,** Massina, Sudan, Africa. Fell June 15, 1900. Described, Meunier, 1901, Comptes Rendus, Vol. 132, No. 7, pp. 441-442. Characteristic structure. Polished piece, 3 x 1 x 0.4 cm., $3.25 ..... 9.9

G. Hexahedrites

Structure and cleavage hexahedral.

Normal Hexahedrite, H. Neumann lines, not granular.

188. **Coahuila, Butcher iron,** Mexico. Known 1837. Described 1855. Faint and very fine Neumann lines. Polished slice, 4.9 x 3.2 x 0.2 cm., $2.50. Bailey collection 30.5

ditto, **Santa Rosa Saltillo,** Bolson de Mapimi, Mexico. Known 1852. Described 1855. Like preceding. Polished slice, 3 x 1.5 x 0.4 cm., $2.20 ..... 15.2

ditto, **Couch iron,** Mexico. Known 1852. Described 1855. Like preceding. Polished, wedge-shaped slice of uniform thickness, 6.5 x 4 x 0.2 cm., $5.25. Bailey collection 36.2

ditto, **Fort Duncan,** Maverick Co., Texas. Found 1882. Described 1885. Like preceding. Polished slice of uniform thickness, 4 x 1.5 x 0.6 cm., $2.00. Bailey collection 28.4

189. **Hex River,** Cape Colony, South Africa. Found 1882. Described, Brezina, 1896, Ann. d. k. k. Naturh. Hofmus., Vol. 10, pp. 291, 349. Very fine Neumann lines, parallel system of troilite plates. Polished slice of uniform thickness, 4 x 3 x 0.5 cm., $22.00. Bailey collection ..... 44.

190. **Iredell,** Bosque Co., Texas. Found 1898. Described, Foote, 1899, Am. Jour. Sc., Ser. 4, Vol. 8, pp. 415, 416. Sharp knife-blade made from a fragment by finder, 3.2 x 2.3 x 0.1 cm., $13.00.. 8.8

ditto, piece with oxidized exterior, 1.5 x 1 x 0.7 cm., $12.00..... 8.

191. **Scottsville,** Allen Co., Kentucky. Found 1867. Described, Whitfield, 1887, Am. Jour. Sc., Ser. 3, Vol. 33, pp. 500, 501. Network of delicate Neumann lines. Polished slice of uniform thickness, 2.3 x 2 x 0.5 cm., $10.00. Bailey collection 19.8

192. **Walker County,** Alabama. Found 1832. Described, Troost, 1845, Am. Jour. Sc., Ser. 1, Vol. 49, p. 344. Fine Neumann lines. Polished slice, 2 x 2 x 0.3 cm., $4.00 ..... 6.2

Grained Hexahedrite, Ha. Structure and cleavage running through the whole mass consisting of grains with differently orientated spangling.

Grams.

193. **Indian Valley,** Floyd Co., Virginia. Found 1887. Described, Kunz, 1891, Mineralog. Magaz., Vol. 9, No. 44, p. 394. London, 1891. Numerous parallel rows of rhabdite. Polished slice, 5 x 2.5 x 1 cm., $40.00 ..... 54.

194. **Summit,** Blount Co., Alabama. Found 1890. Described, Kunz, 1890, Am. Jour. Sc., Ser. 3, Vol. 40, pp. 322, 323. Very coarse grained, typical structure with schiller-like luster. Polished, wedge-shaped slice, 3.5 x 1.5 x 0.3 cm., $75.00. Bailey collection 13.7

195. **Tombigbee River (Jachin*),** Choctaw Co., Alabama. Found 1878. Described, Foote, 1899, Am. Jour. Sc., Ser. 4, Vol. 8, pp. 153-156. Neumann lines intersecting at right angles with very beautiful large schreibersite figures of graphic form. Complete section, polished, 12 x 8 x 0.8 cm., $65.00. See plate XI. 275.

Brecciated Hexahedrite, Hb. Mass consisting of differently orientated hexahedral grains.

196. **Kendall County,** Texas. Found 1887. Described, Brezina, 1887, Neue Meteoriten 3, Ann. Hof. Mus., Vol 2, p. 115. Coarsely granular structure with beautiful schiller-like lustre. Polished slice, 5 x 4.6 x 0.6 cm., $26.00. Bailey collection..... 91.2

H. Ataxites

Structure interrupted.

Cape group, Dc. Rich in nickel; sharp (hexahedral?) etching bands in dull mass.

197. **Cape of Good Hope,** Cape Colony, South Africa. Found 1793. Described, Barrow, 1801, Account of Travels into the Interior of Southern Africa, p. 226, London. Dark homogeneous mass. Polished slice, of uniform thickness, 5 x 2.5 x 0.4 cm., $14.75. Bailey collection 35.7

198. **Kokomo,** Howard Co., Indiana. Found 1862. Described, Cox, 1873, Am. Jour. Sc., Ser. 3, Vol. 5, pp. 155, 156. Typical homogeneous mass with troilite nodule. Polished slice of uniform thickness, 3 x 2.5 x 0.5 cm., $100.00. Bailey collection 23.2

Shingle Springs group, Dsh. Rich in nickel; indistinct parallel blebs.

199. **Shingle Springs,** El Dorado Co., California. Found 1869. Described, Shepard, 1872, Am. Jour. Sc., Ser. 3, Vol. 3, p. 438. Typical mass. Polished slice of uniform thickness, 1.8 x 1.1 x 0.5 cm., $8.00. Bailey collection 9.8

Babbsmill group, Db. Rich in nickel; lustreless, homogeneous mass.

200. **Deep Spring,** Rockingham Co., North Carolina. Found 1846. Described, Venable, 1890, Am. Jour. Sc., Ser. 3, Vol. 40, pp. 161,

* Called De Sotoville by Brezina. The nearest post office is Jachin.

Grams.

162. Dark mass. Polished slice, 5 x 3 x 0.7 cm., $22.50. Bailey collection 75.3

Linnville group, Dl. Rich in nickel; meandering veined or latticed.

201. **Linnville,** Burke Co., North Carolina. Found 1882. Described, Kunz, 1888, Am. Jour. Sc., Ser. 3, Vol. 34, pp. 275-277. Delicate fretwork of minute varied figures. Polished end-piece, 3.5 x 2 x 0.4 cm., $130.00. Bailey collection 21.7

Nedagolla group, Dn. Poor in nickel, grained, no ridges.

202. **Forsyth County,** Georgia. Found 1895. Described, Brezina, 1895, Wiener Sammlung, p. 307. Typical silvery mass. Polished, wedge-shaped slice, 4 x 3 x 0.1 cm., $2.00. Bailey collection 9.5

Siratic group, Ds. Poor in nickel; ridges, incisions or enveloped rhabdites.

203. **Campo Del Cielo,** Gran Chaco, Argentina. Found 1783. Described, Don Rubis de Celis, 1788, Phil. Trans., Vol. 78, pp. 37-42. Polished end-piece, 2 x 1.5 x 0.8 cm., $6.00. Bailey collection 12.6

204. **Rasgata,** Boyaca, Colombia. Found 1810. Described, Mariano de Rivero and Boussingault, 1824, Ann. Chim. Phys., Vol. 25, pp. 438-443. Polished end-piece, 0.8 x 0.8 x 0.7 cm., $3.00. Bailey collection 7.2

205. **Senegal,** Upper Senegal River, West Africa. Found 1716. Described, Compagnon, 1748, Schwabe's allgemeine Historie der Reisen zu Wasser und zu Lande, Leipzig, 1748, Vol. 2, Book 5, Chap. 13, p. 510. Highly varied crystalline structure with numerous minute prisms of rhabdite. Polished slice of uniform thickness with two perforations, 4.5 x 3.5 x 0.4 cm., $73.00. Bailey collection 36.8

Primitiva group, Dp. Poor in nickel; silky streaks and luster.

Muchachos group, Dm. Poor in nickel, grained porphyritic with forsterite.

Supplementary

Oxidized Meteoric Iron

Augustinovka, altered to limonitic shale. Mass, 4 x 3 x 1.2 cm., $5.00 ..... 68.

Cañon Diablo, altered to limonite-magnetite shale. Mass, 8 x 7 x 3.5 cm., $1.25 ..... 373.

Meteoritic Minerals

Schreibersite from the Tombigbee River siderite. $10.00..... 2.

Troilite from the Cañon Diablo siderite. $2.50..... 5.

Olivine from the Ahumada siderolite. $4.00 ..... 8.

Terrestrial Iron

	Grams.
Disco Island, Greenland. Part of mass collected by Baron v. Nordenskiöld. Long considered of meteoric origin. Enclosing large nodules of basalt. $20.00	440.
Josephine Co., Oregon. Josephinite. Lot of pebbles. $4.00	100.
Awarua Bay, New Zealand. Awaruite. Grains. $3.00	3.
Cassel, Germany. In basalt. $3.00	11.

Casts

The collection includes casts of the following forty-one meteorites, valued at $250:

Akburpur	Durala	Merceditas
Babb's Mill	Farmington	Middlesborough
Bath Furnace	Glorieta	Parnallee
Bella Roca	Goalpara	Puquios
Bluff	Hex River	Sarepta
Braunau	Holbrook	Scottsville
Bustee	Homestead	Segowlee
Butsura	Joe Wright	Staunton
Cabin Creek	Juncal	Welland
Carlton	Kenton County	Werchne Udinsk
Chupaderos	Kilbourn	Wichita
Cleveland	Kingston	Wold Cottage
Crab Orchard	Kokstad	Yatoor
De Cewsville	Krähenberg	

PLATE XI.

Tombigbee River. (Jachin), Choctaw Co., Alabama. Found 1878. Grained Hexahedrite with Inclusions of Schreibersite. x 0.75 Diameters. See Pages 24 and 58.

Index and Average Gram Prices

The catalog numbers are those of the Foote Collection listed in Part II. (Sold only in its entirety.) The starred names (*) will also be found in the list of single specimens for sale, as printed in Part I. The gram price opposite each name is the average of all specimens under 400 grams from that locality, contained in Parts I and II.

Foote Collection Number.	Name and Locality of Meteorite.	Average Gram Price.
123.	Abert Iron	$2.69
100.	*Admire	.09
22.	Agen	1.00
101.	*Ahumada	.24
46.	Alais	7.00
52.	Albareto	2.50
20.	*Alfianello	.10
75.	*Allegan	.18
104.	*Amalia	.04
179.	*Arispe	.10
124.	Arlington	.24
53.	Assisi	1.00
110.	Augustinovka	.25
54.	Ausson	.56
105.	Bacubirito	.25
106.	Ballinoo	.12
32.	Barbotan	1.00
186.	Barranca Blanca	1.00
111.	Bear Creek	.84
79.	*Beaver Creek	1.00
112.	*Bella Roca	.19
163.	*Bendego	.13
80.	Bethlehem	10.00
164.	Bischtübe	.10
1.	Bishopville	4.88
103.	Bitburg	.12
65.	Bjurböle	.08
88.	Bluff	.05
113.	*Bridgewater	1.20
10.	Cabezzo de Mayo	4.00
114.	Cambria	.74
203.	*Campo del Cielo	.47
165.	*Cañon Diablo	.03
55.	*Cape Girardeau	2.00
197.	*Cape of Good Hope	.42
107.	*Carlton	.10
125.	*Carthage	.25
126.	*Casas Grandes	.13
166.	*Casey County	1.37
37.	*Castalia	1.00
38.	Chantonnay	.50
127.	Charcas	.24
115.	*Charlotte	3.52
33.	Charsonville	.49
2.	Chassigny	7.00
128.	*Cleveland	.31
188.	*Coahuila (Butcher Iron)	.08
	" (Santa Rosa).	.14
*	" (Couch Iron).	.14
	" (Fort Duncan)	.07
47.	Cold Bokkeveld	$1.50
129.	Colfax	.98
130.	*Coopertown	1.00
167.	*Cosby's Creek	.10
131.	*Costilla Peak	.18
95.	*Crab Orchard	.11
168.	Cranbourne (Beaconsfield)	.11
169.	Cranbourne	.06
29.	Cynthiana	1.00
83.	Daniels Kuil	5.00
132.	*Dalton	.32
34.	Danville	6.00
200.	*Deep Springs	.30
133.	*Descubridora	.11
21.	*Dhurmsala	.14
84.	*Djati Pengilon	.98
90.	Dona Inez	.17
23.	Duruma	4.00
76.	Elm Creek	.22
134.	Emmitsburg	5.00
89.	*Ensisheim	1.00
86.	Estacado	.06
91.	*Estherville	.13
44.	*Farmington	.08
67.	*Forest	.08
13.	Forsyth	2.00
202.	*Forsyth County	.22
135.	Fort Pierre	.93
136.	*Franceville	.10
8.	Frankfort	7.00
14.	Girgenti	2.07
137.	*Glorieta Mt.	.12
116.	*Grand Rapids	.15
117.	Great Fish River	2.50
68.	Heredia	3.50
56.	Hessle	.38
189.	*Hex River	.50
81.	*Holbrook	.09
39.	*Homestead	.10
15.	Honolulu	2.00
102.	Imilac	.19
51.	Indarch	.90
193.	Indian Valley	.74
190.	*Iredell	1.49
138.	Jackson County	3.03
118.	*Jamestown	.81
3.	*Jelica	1.50
170.	Jenny's Creek	.40
6.	Juvinas	.55